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JOURNAL OF PROCEEDINGS AND ADDRESSES

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

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NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES

Journal

OF

Proceedings and Addresses

OF THE

FIFTIETH ANNUAL MEETING

HELD AT

CHICAGO, ILLINOIS

JULY 6–12

1912

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NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1857–1870

THE NATIONAL TEACHERS ASSOCIATION

Organized August 26, 1857, at Philadelphia, Pennsylvania.

PURPOSE—*To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States.*

The name of the association was changed at Cleveland, Ohio, on August 15, 1870, to the "National Educational Association."

1870–1907

NATIONAL EDUCATIONAL ASSOCIATION

Incorporated under the laws of the District of Columbia, February 24, 1886, under the name, "National Education Association," which was changed to "National Educational Association," by certificate filed November 6, 1886.

1907–

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Incorporated under a special act of Congress, approved June 30, 1906, to succeed the "National Educational Association." The charter was accepted and by-laws were adopted at the Fiftieth Anniversary Convention held July 10, 1907, at Los Angeles, California.

ACT OF INCORPORATION

AN ACT TO INCORPORATE THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

SECTION 1. That the following named persons, who are now officers and directors and trustees of the National Educational Association, a corporation organized in the year eighteen hundred and eighty-six, under the Act of General Incorporation of the Revised Statutes of the District of Columbia, viz.: Nathan C. Schaeffer, Eliphalet Oram Lyte, John W. Lansinger, of Pennsylvania; Isaac W. Hill, of Alabama; Arthur J. Matthews, of Arizona; John H. Hineman, George B. Cook, of Arkansas; Joseph O'Connor, Josiah L. Pickard, Arthur H. Chamberlain, of California; Aaron Gove, *Ezekiel H. Cook, Lewis C. Greenlee, of Colorado; Charles H. Keyes, of Connecticut; George W. Twitmyer, of Delaware; *J. Ormond Wilson, *William T. Harris, Alexander T. Stuart, of the District

* Deceased.

of Columbia; Clem Hampton, of Florida; William M. Slaton, of Georgia; Frances Mann, of Idaho; J. Stanley Brown, *Albert G. Lane, Charles I. Parker, John W. Cook, Joshua Pike, Albert R. Taylor, Joseph A. Mercer, of Illinois; Nebraska Cropsey, Thomas A. Mott, of Indiana; John D. Benedict, of Indian Territory; John F. Riggs, Ashley V. Storm, of Iowa; John W. Spindler, Jasper N. Wilkinson, A. V. Jewett, Luther D. Whittemore, of Kansas; William Henry Bartholomew, of Kentucky; Warren Easton, of Louisiana; *John S. Locke, of Maine; M. Bates Stephens, of Maryland; Charles W. Eliot, *Mary H. Hunt, Henry T. Bailey, of Massachusetts; Hugh A. Graham, Charles G. White, William H. Elson, of Michigan; *William F. Phelps, Irwin Shepard, John A. Cranston, of Minnesota; Robert B. Fulton, of Mississippi; *F. Louis Soldan, James M. Greenwood, William J. Hawkins, of Missouri; Oscar J. Craig, of Montana; George L. Towne, of Nebraska; Joseph E. Stubbs, of Nevada; James E. Klock, of New Hampshire; James M. Green, John Enright, of New Jersey; Charles M. Light, of New Mexico; *James H. Canfield, Nicholas Murray Butler, William H. Maxwell, Charles R. Skinner, *Albert P. Marble, James C. Byrnes, of New York; James Y. Joyner, Julius Isaac Foust, of North Carolina; Pitt Gordon Knowlton, of North Dakota; Oscar T. Corson, Jacob A. Shawan, Wells L. Griswold, of Ohio; Edgar S. Vaught, Andrew R. Hickham, of Oklahoma; Charles Carroll Stratton, Edwin D. Ressler, of Oregon; Thomas W. Bicknell, Walter Ballou Jacobs, of Rhode Island; David B. Johnson, Robert P. Pell, of South Carolina; Moritz Adelbert Lange, of South Dakota; Eugene F. Turner, of Tennessee; Lloyd E. Wolfe, of Texas; David H. Christensen, of Utah; Henry O. Wheeler, Isaac Thomas, of Vermont; Joseph L. Jarman, of Virginia; Edward T. Mathes, of Washington; T. Marcellus Marshall, Lucy Robinson, of West Virginia; Lorenzo D. Harvey, of Wisconsin; Thomas T. Tynan, of Wyoming; Cassia Patton, of Alaska; Frank H. Ball, of Porto Rico; Arthur F. Griffiths, of Hawaii; C. H. Maxson, of the Philippine Islands, and such other persons as now are or may hereafter be associated with them as officers or members of said Association, are hereby incorporated and declared to be a body corporate of the District of Columbia by the name of the "National Education Association of the United States," and by that name shall be known and have perpetual succession with the powers, limitations, and restrictions herein contained.

SEC. 2. That the purpose and object of the said corporation shall be to elevate the character and advance the interests of the profession of teaching, and to promote the cause of education in the United States. This corporation shall include the National Council of Education and the following departments, and such others as may hereafter be created by organization or consolidation, to wit: the Departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, of Special Education; seventeenth, of Indian Education; the powers and duties and the number and names of these departments and of the National Council of Education may be changed or abolished at the pleasure of the corporation, as provided in its By-Laws.

SEC. 3. That the said corporation shall further have power to have and to use a common seal, and to alter and change the same at its pleasure; to sue or to be sued in any court of the United States, or other court of competent jurisdiction; to make By-Laws not inconsistent with the provisions of this act or of the constitution of the United States; to take or receive, whether by gift, grant, devise, bequest, or purchase, any real or personal estate, and to hold, grant, convey, hire, or lease the same for the purposes of its incorporation; and to accept and administer any trust of real or personal estate for any educational purpose within the objects of the corporation.

SEC. 4. That all real property of the corporation within the District of Columbia,

* Deceased.

which shall be used by the corporation for the educational or other purposes of the corporation as aforesaid, other than the purposes of producing income, and all personal property and funds of the corporation held, used, or invested for educational purposes aforesaid, or to produce income to be used for such purposes, shall be exempt from taxation; *provided*, however, That this exemption shall not apply to any property of the corporation which shall not be used for, or the income of which shall not be applied to, the educational purposes of the corporation; and, *provided further*, That the corporation shall annually file, with the Commissioner of Education of the United States, a report in writing, stating in detail the property, real and personal, held by the corporation, and the expenditure or other use or disposition of the same, or the income thereof, during the preceding year.

SEC. 5. That the membership of the said corporation shall consist of three classes of members—viz., active, associate, and corresponding—whose qualifications, terms of membership, rights, and obligations shall be prescribed by the By-Laws of the corporation.

SEC. 6. That the officers of the said corporation shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, an Executive Committee, and a Board of Trustees.

The Board of Directors shall consist of a President, the First Vice-President, the Secretary, the Treasurer, the chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the active members for the term of one year, or until their successors are chosen, and of all life directors of the National Educational Association. The United States Commissioner of Education, and all former Presidents of the said Association now living, and all future Presidents of the Association hereby incorporated, at the close of their respective terms of office, shall be members of the Board of Directors for life. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the corporation, excepting those herein intrusted to the Board of Trustees; and shall possess such other powers as shall be conferred upon them by the By-Laws of the corporation.

The Executive Committee shall consist of five members, as follows: the President of the Association, the First Vice-President, the Treasurer, the Chairman of the Board of Trustees, and a member of the Association, to be chosen annually by the Board of Directors, to serve one year. The said committee shall have authority to represent, and to act for, the Board of Directors in the intervals between the meetings of that body, to the extent of carrying out the legislation adopted by the Board of Directors under general directions as may be given by said board.

The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the Association, who shall be a member *ex officio*, during his term of office. At the first meeting of the Board of Directors, held during the annual meeting of the Association at which they were elected, they shall elect one trustee for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership.

SEC. 7. That the invested fund now known as the "Permanent Fund of the National Educational Association," when transferred to the corporation hereby created, shall be held by such corporation as a Permanent Fund and shall be in charge of the Board of Trustees, who shall provide for the safekeeping and investment of such fund, and of all other funds which the corporation may receive by donation, bequest, or devise. No part of the principal of such Permanent Fund or its accretions shall be expended, except by a two-thirds vote of the active members of the Association present at any annual meeting, upon the recommendation of the Board of Trustees, after such recommendation has been approved by vote of the Board of Directors, and after printed notice of the proposed expenditure has been mailed to all active members of the Association. The income of the Permanent Fund shall be used only to meet the cost of maintaining the organization of the

Association and of publishing its annual volume of *Proceedings*, unless the terms of the donation, bequest, or devise shall otherwise specify, or the Board of Directors shall otherwise order. It shall also be the duty of the Board of Trustees to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association acting under the authority of the Board of Directors. When practicable, the Board of Trustees shall invest, as part of the Permanent Fund, all surplus funds exceeding five hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the Association for the previous year, and providing for the fixed expenses and for all appropriations made by the Board of Directors for the ensuing year.

The Board of Trustees shall elect the Secretary of the Association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of his office for a period not to exceed four years.

SEC. 8. That the principal office of the said corporation shall be in the city of Washington, District of Columbia; *provided*, That the meetings of the corporation, its officers, committees, and departments, may be held, and that its business may be transacted, and an office or offices may be maintained, elsewhere, within the United States, as may be determined, by the Board of Directors, or otherwise in accordance with the By-Laws.

SEC. 9. That the Charter, Constitution, and By-Laws of the National Educational Association shall continue in full force and effect until the charter granted by this act shall be accepted by such Association at the next annual meeting of the Association, and until new By-Laws shall be adopted; and that the present officers, directors, and trustees of said Association shall continue to hold office and perform their respective duties as such until the expiration of terms for which they were severally elected or appointed, and until their successors are elected. That at such annual meeting the active members of the National Educational Association, then present, may organize and proceed to accept the charter granted by this act and adopt By-Laws, to elect officers to succeed those whose terms have expired or are about to expire, and generally to organize the "National Education Association of the United States"; and that the Board of Trustees of the corporation hereby incorporated shall thereupon, if the charter granted by this act be accepted, receive, take over, and enter into possession, custody, and management of all property, real and personal, of the corporation heretofore known as the National Educational Association, incorporated as aforesaid, under the Revised Statutes of the District of Columbia and all its rights, contracts, claims, and property of every kind and nature whatsoever, and the several officers, directors, and trustees of such last-named Association, or any other person having charge of any of the securities, funds, books, or property thereof, real or personal, shall on demand deliver the same to the proper officers, directors, or trustees of the corporation hereby created. *Provided*, That a verified certificate executed by the presiding officer and secretary of such annual meeting, showing the acceptance of the charter granted by this act by the National Educational Association shall be legal evidence of the fact, when filed with the Recorder of Deeds of the District of Columbia; and, *provided further*, That in the event of the failure of the Association to accept the charter granted by this act at said annual meeting then the charter of the National Educational Association and its corporate existence shall be, and are hereby extended until the thirty-first day of July, nineteen hundred and eight, and at any time before said date its charter may be extended in the manner and form provided by the general corporation law of the District of Columbia.

SEC. 10. That the rights of creditors of the said existing corporation, known as the National Educational Association, shall not in any manner be impaired by the passage of this act, or the transfer of the property heretofore mentioned, nor shall any liability or obligation, or the payment of any sum due or to become due, or any claim or demand, in any manner, or for any cause existing against the said existing corporation, be released or impaired; and the corporation hereby incorporated is declared to succeed to the obligations and liabilities, and to be held liable to pay and discharge all of the debts, liabilities,

and contracts of the said corporation so existing, to the same effect as if such new corporation had itself incurred the obligation or liability to pay such debt or damages, and no action or proceeding before any court or tribunal shall be deemed to have abated or been discontinued by reason of this act.

SEC. 11. That Congress may from time to time alter, repeal, or modify this act of incorporation, but no contract or individual right made or acquired shall thereby be divested or impaired.

Approved June 30, 1906.

Accepted and adopted as the Constitution of the National Education Association of the United States by the active members of the National Educational Association in annual session at Los Angeles, Cal., July 10, 1907.

BY-LAWS

(Amended at meeting of active members held in Chicago, Ill., July 10, 1912)

ARTICLE I—MEMBERSHIP

SECTION 1. Teachers, others actively engaged in educational work, and educational institutions as defined in Section 2, may become active members of the National Education Association of the United States upon the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 2. Educational institutions shall include schools, school boards, library boards, educational publishers, and such clubs and similar organizations as are distinctly educational or have educational departments properly organized with a definite membership.

SEC. 3. Educational institutions as defined in Section 2 may be enrolled as active members and represented by any person regularly connected with or a member of the institution, and such representative may exercise all the rights and enjoy all the privileges of active membership, including the right to vote at business meetings; *provided*, That such representative presents a certificate showing that the person named therein has been regularly elected as such representative of the faculty or membership of such institution; but no person shall under any circumstances have the right to cast more than one vote.

SEC. 4. The annual dues of active members are two dollars, which shall be paid at the time of the annual meeting of the Association, or shall be sent to the Secretary before November 1 of each year. An active member may discontinue his membership by giving written notice to the Secretary before November 1. An active member forfeits his membership by being two years in arrears. Those who have forfeited or discontinued their membership may exercise the option of renewing the same by paying all arrears and getting the published *Proceedings* of the intervening years, or of becoming members on the same terms as new members. Active members shall be entitled to the published *Proceedings* without coupon or other conditions.

SEC. 5. All life members and life directors shall be denominated active members, and shall have all the rights and privileges of such members without the payment of the annual dues.

SEC. 6. The right to vote and to hold office in the Association, the Council, or the departments is open to all active members whose dues are paid.

SEC. 7. Any person may become an associate member for one year by paying a membership fee of two dollars.

SEC. 8. Eminent educators not residing in America may be elected, by the Board of Directors, corresponding members. The number of corresponding members shall at no time exceed fifty. They shall not pay any dues.

SEC. 9. The names of active and corresponding members shall be printed in the

published *Proceedings*, or the *Yearbook* of the Association, with their respective educational titles, offices, and addresses.

ARTICLE II—ELECTION OF OFFICERS.

SECTION 1. The President, Vice-Presidents, Treasurer, and Directors of the National Education Association of the United States shall be chosen by the active members of the Association by ballot, at their annual business meeting, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual meeting subsequent to their election, and until their successors are chosen, except as herein provided. The Secretary and the Treasurer shall enter upon their duties at a date which shall be determined by the Board of Trustees and which shall not be later than the first of October and shall continue in office during the terms for which they are separately chosen and until their successors are duly elected.

ARTICLE III—DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Association, and shall perform the duties usually devolving upon the chief executive of such an association. In his absence, the ranking Vice-President who is present shall preside; and in the absence of all Vice-Presidents a chairman *pro tempore* shall be elected. The President shall prepare the program for the general sessions of the annual meeting of the Association, and with the approval of the Executive Committee, shall determine the time and place of the general meeting of the Association and of the various departments not definitely fixed by these By-Laws, and shall have the power to require such changes to be made in the programs of the Council and the departments as will promote the interest of the annual meeting. The President shall be a member *ex officio* of the Board of Trustees and chairman of the Board of Directors and of the Executive Committee. He shall sign all bills approved for payment by the Board of Directors, and all bills approved or authorized by the Executive Committee between the meetings of the Board of Directors. On the expiration of his term of office as President, he shall become first Vice-President for the ensuing year, and shall be chairman *ex officio* of the Committee on Publication.

SEC. 2. The Secretary shall keep a full and accurate record of the proceedings of the general meetings of the Association and all meetings of the Board of Directors and of the Executive Committee, shall conduct the business of the Association as provided in the Articles of Incorporation and the By-Laws, and in all matters not definitely prescribed therein, shall be under the direction of the Executive Committee and in the absence of direction by the Executive Committee, shall be under the direction of the President, and shall receive or collect all moneys due the Association and pay the same each month to the Treasurer, shall countersign all bills approved for payment by the Board of Directors or by the Executive Committee in the interval between the meetings of the Board of Directors or on the approval of the President acting under authority of the Board of Directors, or Executive Committee. The Secretary shall have his records present at all meetings of the active members of the Association, of the Board of Directors, and of the Executive Committee. He shall keep a list of members as required by Section 9 of Article I of these By-Laws and shall revise said list annually. He shall be secretary of the Board of Directors, and a member of the Committee on Publication. He shall be the custodian of all the property of the Association not in charge of the Treasurer and the Board of Trustees. He shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. He shall submit his annual report to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted to the Board of Directors at its annual meeting. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association. The

Secretary shall not print, publish, or distribute any official report or other document without the approval of the publication committee.

SEC. 3. The Treasurer shall receive from the Secretary and under the direction of the Board of Trustees shall hold in safekeeping all moneys paid to the Association; shall pay the same only upon the order of the Board of Trustees; shall notify the President of the Association and the Chairman of the Board of Trustees whenever the surplus funds in his possession exceed five hundred dollars; shall keep an exact account of his receipts and expenditures, with vouchers for the latter; and said accounts, ending on the thirtieth day of June of each year, he shall render to the Executive Committee not later than July 1, and when approved by said committee, they shall be transmitted by the committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting and to the active members at their annual business meeting. The Treasurer shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association.

SEC. 4. The Board of Directors shall elect corresponding members as prescribed by Section 8 of Article I of these By-Laws, shall elect members of the National Council of Education as provided in Section 3 of Article IV of these By-Laws, shall have power to fill all vacancies in its own body and in the Board of Trustees; shall recommend to the Executive Committee the place for holding the annual meeting of the Association, the Council of Education, and the departments. The Board of Directors shall approve all bills incurred under authority of the Board of Directors, the Executive Committee, or the President and Secretary acting under the authority of the Board of Directors or Executive Committee, shall appropriate from the current funds of the year the amounts of money ordered by the active members at their annual business meeting for the work of all special committees of investigation and research authorized and provided for by such active members at their annual business meeting, shall make a full report of the financial condition of the Association (including the reports of the Secretary, the Treasurer, and the Board of Trustees) to the active members at their annual business meeting, and shall do all in its power to make the Association a useful and honorable institution.

SEC. 5. The Executive Committee shall assist the presiding officer in arranging for the time and place of the annual meeting of the Association, of the National Council of Education, and of the various departments.

The Executive Committee shall recommend to active members at their annual business meeting the appointment of special committees for investigation or research, the subjects for which may have been suggested by the National Council or by the active membership of the National Education Association or by any of its departments; it shall recommend the amount of money to be appropriated for such investigations. When such special committees are provided for and duly authorized by the active members at their annual business meeting, the Executive Committee shall have general supervision of them; shall receive and consider all reports made by them and shall print such reports, and present the same, together with the reports received from the Secretary, the Treasurer, and the Board of Trustees and the recommendations of the Executive Committee thereon, to the active members at their annual business meeting. All such special committees shall be appointed by the President of the National Education Association.

The Executive Committee shall fill all vacancies occurring in the body of officers of the Association except vacancies in the Board of Directors, Board of Trustees, and the office of Secretary.

SEC. 6. The Board of Trustees shall require of the Secretary and Treasurer bonds of such amount as may be determined by said board, for the faithful performance of their duties, shall make a full report of the finances of the Association to the Executive Com-

mittee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted by the Executive Committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting of the Association. It shall choose annually its own chairman and secretary.

ARTICLE IV—THE NATIONAL COUNCIL OF EDUCATION

SECTION 1. The National Council of Education shall discuss educational questions of public and professional interest; propose to the Executive Committee, from time to time, suitable subjects for investigation and research; have a report made at its annual meeting on "Educational Progress during the Past Year"; and in other ways use its best efforts to further the objects of the Association and to promote the cause of education in general.

SEC. 2. The National Council of Education shall consist of one hundred and twenty regular members, selected from the active membership of the National Education Association. Any active member of the Association is eligible to membership in the Council, and each member shall be elected for six years and until his successor is elected.

SEC. 3. The annual election of members of the Council shall be held at the time of the annual meeting of the Association. The Board of Directors of the Association shall annually elect ten members and the Council ten members, and each body shall fill all vacancies in its quota of members. No state, territory, or district in the United States shall have at one time more than seven regular members in the Council.

SEC. 4. The annual meeting of the Council shall be held during the week of the annual meeting of the Association.

SEC. 5. The absence of a regular member from two successive annual meetings of the Council shall be considered equivalent to his resignation of membership. Persons whose regular membership in the Council has expired shall be denominated honorary members of the Council during the time of their active membership in the Association, with the privilege of attending the regular sessions of the Council and participating in its discussions. A member who discontinues or forfeits his active membership in the Association forfeits his membership in the Council.

SEC. 6. The officers of the Council shall consist of a president, a vice-president, a secretary, and such standing committees as may be prescribed by its by-laws, all of whom shall be regular members of the Council. The secretary of the Council shall, in addition to performing the duties pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the Council for publication.

SEC. 7. The National Council of Education is hereby authorized to adopt by-laws or its government not inconsistent with the Act of Incorporation or the By-Laws of the Association; *provided*, That such by-laws be submitted to, and approved by, the Board of Directors of the Association before they shall become operative.

SEC. 8. The powers and duties of the Council may be changed or the Council abolished upon a two-thirds vote of the Association taken at the annual business meeting of the Association; *provided*, That notice of the proposed action has been given at the preceding annual business meeting of the Association.

ARTICLE V—DEPARTMENTS

SECTION 1. The following departments are now (1912) in existence, to wit: The departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training, Art, and Technical Education; sixth, of Kindergarten Education; seventh, of Music Education; eighth, of Secondary Education; ninth, of Business Education; tenth, of Child Study; eleventh, of Physical Education; twelfth, of Natural Science Instruction; thirteenth, of School

Administration; fourteenth, the Library Department; fifteenth, of Special Education; sixteenth, of School Patrons; seventeenth, of Rural and Agricultural Education.

SEC. 2. The active members of the Association, and no others, are members of each department of the Association.

SEC. 3. Each department shall hold its annual meeting at the time and place of the annual meeting of the Association, except the Department of Superintendence and the Department of Normal Schools, which may hold their annual meeting in February of each year or at such other times as may be determined by said departments, subject to the approval of the Board of Directors of the Association.

SEC. 4. The object of the meetings of the departments shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be prepared by the respective presidents in conference with, and under the general direction of, the President of the Association. Each department shall be limited to two sessions, with formal programs, unless otherwise ordered by the President of the Association, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 5. The officers of each department shall consist of a president, a vice-president, and a secretary, who shall be elected at the last formal session of the department to serve one year and until their successors are duly elected, and who shall, at the time of their election, be active members of the Association.

SEC. 6. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the meetings of the department for publication.

SEC. 7. All departments shall have equal rights and privileges, with the exception stated in Section 3 of this article. They shall be named in Section 1 of this article in the order of their establishment and shall be dropped from the list when discontinued. Each department may be governed by its own regulations in so far as they are not inconsistent with the Act of Incorporation or these By-Laws.

SEC. 8. A new department may be established by a two-thirds vote of the Board of Directors taken at a regular meeting of the board or by a two-thirds vote of the active members at any annual business meeting; *provided*, That a written application for said department, with title and purpose of the same, shall have been made at the regular meeting of the board next preceding the one at which action is taken, or at the preceding annual business meeting, by at least twenty-five members engaged or interested in the field of labor in the interest of which the department is purposed to be established. A department already established may be discontinued by the Board of Directors upon a two-thirds vote taken at a regular meeting, or by a two-thirds vote of the active members at any business meeting of the active members; *provided*, That announcement has been made of the proposed action at a regular meeting of the board the preceding year, or at the preceding annual business meeting. A department shall be discontinued when it fails to hold a regular meeting for two successive years.

ARTICLE VI—COMMITTEES

SECTION 1. On the first day of each annual meeting of the Association the President shall appoint a Committee on Resolutions, consisting of seven active members, and a Committee on Necrology, consisting of five active members, and on the third day of such meeting he shall appoint a Committee on Nominations, consisting of one active member from each state, territory, and district represented at the meeting. Each state, territorial, and district representative shall be appointed on the nomination of the active members in attendance from said state, territory, or district; *provided*, That three or more active members participate in said nomination in accordance with these By-Laws; and *provided further*, That in case of the failure of the active members of any state, terri-

tory, or district, to nominate a member of the nominating committee in accordance with these By-Laws, the President shall appoint an active member from said state, territory, or district, to serve on said committee. At the regular meeting of the Board of Directors on the first day of the annual meeting, the President shall appoint an Auditing Committee consisting of three active members of the Association, no one of whom shall be either a trustee or a director; to this committee shall be referred the report of the expert accountant, together with the communication of the President transmitting the same, as provided in Section 6 of this article; and the committee shall report its findings at the meeting of active members. The chairman of each of the foregoing committees shall be designated by the President of the Association at the time of its appointment.

SEC. 2. The meetings of active members present from the several states, territories, etc., to nominate members of the nominating committee shall be held on the first day of the annual meeting of the Association, at such time and places as shall be designated on the annual program by the President of the Association.

SEC. 3. The Committee on Nominations shall meet on the fourth day of the annual meeting at 9:00 A.M., at a place designated by the President of the Association, and shall nominate persons for the following offices in the Association, to wit: one person for President, eleven persons for Vice-Presidents, one person for Treasurer, and one person from each state, territory, and district in the United States as a member of the Board of Directors. It shall report to the active members at their annual business meeting.

SEC. 4. The Committee on Resolutions shall report at the annual business meeting of active members, and, except by unanimous consent, all resolutions shall be referred to said committee, without discussion. This committee shall receive and consider all resolutions proposed by active members, or referred to it by the President; some time during the second day of the annual meeting of the Association the committee shall hold a meeting, at a place and time to be announced in the printed program, for the purpose of receiving proposed resolutions and hearing those who may wish to advocate them.

SEC. 5. The Committee on Necrology shall prepare for the published *Proceedings* a list of the active and corresponding members that have died during the year, accompanied by memorial sketches whenever practicable.

SEC. 6. Within thirty days prior to the time of the annual meeting of the Association, the President shall appoint a competent person, firm, or corporation licensed to do business as expert accountants; the accountants so appointed shall examine the accounts, papers, and vouchers of the Secretary, the Treasurer, and the Board of Trustees, and compare the same, and shall also examine the securities of the Permanent Fund held by the Board of Trustees. The report of the said accountants shall be filed with the President before the opening day of the annual meeting of the Association, and shall be by him submitted with such comments as he may think proper, to the Board of Directors, at their meeting held on the first day of the annual meeting of the Association.

ARTICLE VII—MEETINGS

SECTION 1. A stated meeting of the Association, of the Council of Education, and of each department shall be held annually at such time and place as shall be determined by the Board of Directors or the Executive Committee acting for the board in accordance with these By-Laws. An annual meeting of the Association and its subordinate bodies may be omitted for an extraordinary cause, upon the written consent of two-thirds of the directors of the Association, obtained by the Executive Committee.

SEC. 2. The annual meeting of the Association shall be held in July, beginning on a day determined by the Executive Committee. Two sessions shall be held daily, unless otherwise ordered by the President of the Association. The annual business meeting of the active members shall be held on the fourth day of the annual meeting at 11:00 A.M. A regular meeting of the Board of Directors shall be held on the first day of the annual

meeting at 10:30 A.M. The first regular meeting of the new Board of Directors shall be held as soon as practicable and within twenty-four hours after the close of the last session of the annual meeting, the place and time of the meeting to be announced in the printed program. The Board of Trustees shall hold its annual meeting at some convenient time and immediately following the meeting of the new Board of Directors referred to above in this section. Special meetings of the trustees may be called by the chairman, and shall be called on request of the majority of the Board of Trustees. Due notice of all meetings of the Board of Trustees shall be given to every member of the board by the secretary thereof.

ARTICLE VIII—PROCEEDINGS

SECTION 1. The proceedings of the meeting of the Association, the Council, and the departments shall be published under the direction of a committee consisting of the President, the First Vice-President, and the Secretary, the First Vice-President acting as chairman of the committee; *provided*, That in the opinion of the Executive Committee the funds of the Association warrant the publication. Each member of the Association shall be entitled to a copy of the *Proceedings*. Associate members must make written application to the Secretary on or before November 1 for a copy in order to obtain it. Corresponding members, and active members whose dues are paid, will receive the published *Proceedings* without written application.

SEC. 2. No paper, lecture, or address shall be read before the Association or any of the departments in the absence of its author, without the approval of the President of the Association or of the departments interested, nor shall any such paper, lecture, or address be published in the *Proceedings*, without the approval of the Executive Committee.

ARTICLE IX—ELECTIONS, QUORUM

SECTION 1. The certificate of membership, in connection with the official list of active members, shall be accepted as evidence that members are entitled to vote.

SEC. 2. Representatives from twenty-five states and territories shall constitute a quorum in all meetings of active members and of the Board of Directors.

ARTICLE X—AMENDMENTS

SECTION 1. These By-Laws may be altered or amended at the annual business meeting of the active members by unanimous consent, or by a two-thirds vote of the active members present if the alteration or amendment shall have been substantially proposed in writing at the annual business meeting next preceding the one at which action is taken; due announcement of the proposed action shall be made in the annual published *Proceedings*.

NATIONAL EDUCATIONAL ASSOCIATION

NOW KNOWN AS THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

CERTIFICATE

of Acceptance of Charter and Adoption of By-Laws under Act of Congress approved June 30, 1906.

We, the undersigned, Nathan C. Schaeffer, the presiding officer, and Irwin Shepard, the secretary of the meeting of the National Educational Association held at Los Angeles, California, on the 10th day of July, 1907, said meeting being the annual meeting of the Asso-

ciation held next after the passage of an act of Congress entitled "An Act to Incorporate the National Education Association of the United States,"

Do hereby certify, that at said meeting held pursuant to due notice, a quorum being present, the said Association adopted resolutions of which true copies are hereto attached, and accepted the Charter of the National Education Association of the United States, granted by said act of Congress, and adopted By-Laws as provided in said act and elected officers; and the undersigned pursuant to said resolutions

Do hereby certify that the National Education Association of the United States has duly accepted said Charter granted by said act of Congress, and adopted By-Laws, and is the lawful successor to the National Educational Association.

In witness whereof, we have hereunto signed our names this 20th day of August, 1907.

NATHAN C. SCHAEFFER, *Presiding Officer*
IRWIN SHEPARD, *Secretary*

VERIFICATION

RESOLUTIONS ADOPTED BY THE ACTIVE MEMBERS, JULY 10, 1907

1. *Resolved*, That the National Educational Association hereby accepts the Charter granted by an act of Congress entitled "An Act to Incorporate the National Education Association of the United States," passed June 30, 1906, and that the President and Secretary of this meeting be authorized and directed to execute and file with the Recorder of Deeds of the District of Columbia a verified certificate showing the acceptance by the Association of the Charter granted by said act.

2. *Resolved*, That the proposed By-Laws of which notice was given at the annual meeting of the Association held on July 6, 1905, which are printed in full in the journal of said meeting, be and the same are hereby adopted to take effect immediately.

3. *Resolved*, That the Association adopt as its corporate seal a circle containing the title "National Education Association of the United States," and the dates "1857–1907."

4. *Resolved*, That the Association do now proceed to elect officers, and to organize under the Charter granted by the act of Congress.

Filed in the office of the Recorder of Deeds of the District of Columbia, September 4, 1907.

CALENDAR OF MEETINGS

NATIONAL TEACHERS ASSOCIATION

1857—PHILADELPHIA, PA. (Organized)
James L. Enos, Chairman.
W. E. Sheldon, Secretary.

1858—CINCINNATI, OHIO
Z. Richards, President.
J. W. Bulkley, Secretary.
A. J. Rickoff, Treasurer.

1859—WASHINGTON, D.C.
A. J. Rickoff, President.
J. W. Bulkley, Secretary.
C. S. Pennell, Treasurer.

1860—BUFFALO, N.Y.
J. W. Bulkley, President.
Z. Richards, Secretary.
O. C. Wight, Treasurer.

1861, 1862—No session.

1863—CHICAGO, ILL.
John D. Philbrick, President.
James Cruikshank, Secretary.
O. C. Wight, Treasurer.

1864—OGDENSBURG, N.Y.
W. H. Wells, President.
David N. Camp, Secretary.
Z. Richards, Treasurer.

1865—HARRISBURG, PA.
S. S. Greene, President.
W. E. Sheldon, Secretary.
Z. Richards, Treasurer.

1866—INDIANAPOLIS, IND.
J. P. Wickersham, President.
S. H. White, Secretary.
S. P. Bates, Treasurer.

1867—No session.

1868—NASHVILLE, TENN.
J. M. Gregory, President.
L. Van Bokkelen, Secretary.
James Cruikshank, Treasurer.

1869—TRENTON, N.J.
L. Van Bokkelen, President.
W. E. Crosby, Secretary.
A. L. Barber, Treasurer.

1870—CLEVELAND, OHIO
Daniel B. Hagar, President.
A. P. Marble, Secretary.
W. E. Crosby, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871—ST. LOUIS, MO.
J. L. Pickard, President.
W. E. Crosby, Secretary.
John Hancock, Treasurer.

1872—BOSTON, MASS.
E. E. White, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1873—ELMIRA, N.Y.
B. G. Northrop, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1874—DETROIT, MICH.
S. H. White, President.
A. P. Marble, Secretary.
John Hancock, Treasurer.

1875—MINNEAPOLIS, MINN.
W. T. Harris, President.
M. R. Abbott, Secretary.
A. P. Marble, Treasurer.

1876—BALTIMORE, MD.
W. F. Phelps, President.
W. D. Henkle, Secretary.
A. P. Marble, Treasurer.

1877—LOUISVILLE, KY.
M. A. Newell, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1878—No session.

1879—PHILADELPHIA, PA.
John Hancock, President.
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President	F. B. DYER, Superintendent of Schools	Boston, Mass.
First Vice-President	SAMUEL HAMILTON, Superintendent of Schools of Allegheny County	Pittsburgh, Pa.
Second Vice-President	MRS. ELLOR CARLISLE RIPLEY, Assistant Superintendent of Schools	Boston, Mass.
Secretary	BURR WALTER TORREYSON, State Department of Education	Little Rock, Ark.

Manual Training and Art

President	ARTHUR L. WILLISTON, Director, Wentworth Institute	Boston, Mass.
Vice-President	LILLIAN S. CUSHMAN, School of Education, University of Chicago	Chicago, Ill.
Secretary	IRENE E. MCDERMOTT, Director of Household Economics	Pittsburgh, Pa.
Corresponding Secretary	R. W. SELVIDGE, Professor of Manual Arts, Teachers College, University of Missouri	Columbia, Mo.

Music

President	*WILL EARHART, Director of Music, Public Schools	Pittsburgh, Pa.
Vice-President	AGNES BENSON, Supervisor of Music, Public Schools	Chicago, Ill.
Secretary	ELIZABETH CASTERTON, Supervisor of Music, Public Schools	Rochester, N.Y.

Business

President	THOMAS L. BRECHEEN, High School	Calistoga, Cal.
Vice-President	*C. H. PRESTON, Department of Commerce, University of Minnesota	Minneapolis, Minn.
Secretary	W. A. SHEAFFER, Head of Commercial Department, West Division High School	Milwaukee, Wis.

Child Hygiene

President	W. A. JESSUP, Dean, School of Education, University of Indiana	Bloomington, Ind.
Vice-President	F. B. DRESSLAR, Specialist in School Hygiene, U.S. Bureau of Education	Washington, D.C.
Secretary	ANNA IRENE JENKINS, Director of Roosevelt Kindergartens	Pasadena, Cal

* Resigned.

Physical

President	W. E. Day, Director, Deseret Gymnasium	Salt Lake City, Utah
Vice-President	*George W. Ehler, Professor of Physical Education, University of Wisconsin	Madison, Wis.
Secretary	Mabel M. Wright, Director, Physical Education for Girls, Carl Schurz High School	Chicago, Ill.

Science

President	H. L. Terry, State High School Inspector	Madison, Wis.
Vice-President	John F. Woodhull, Professor of Physical Science, Teachers College, Columbia University	New York, N.Y.
Secretary	Jesse L. Smith, Superintendent of Schools	Highland Park, Ill.

School Administration

President	J. H. Francis, Superintendent of Schools	Los Angeles, Cal.
Vice-President	C. A. Wait, President, Board of Education	Decatur, Ill.
Secretary	Frank M. Bruce, *American School Board Journal*	Milwaukee, Wis.

Library

President	Mary E. Hall, Librarian, Girls' High School	Brooklyn, N.Y.
Vice-President	James V. Sturges, Principal, State Normal School	Geneseo, N.Y.
Secretary	Effie L. Power, Supervisor of Children's Work, Public Library	St. Louis, Mo.

Special

President	Carrie B. Levy, Supervisor of Classes for Blind, Public Schools	Milwaukee, Wis.
Vice-President	Harris Taylor, Principal, Institution for the Improved Instruction of Deaf Mutes	New York, N.Y.
Secretary	M. P. E. Groszmann, Educational Director, National Association for the Study and Education of Exceptional Children	Plainfield, N.J.

School Patrons

President	Mrs. William S. Hefferan, National Congress of Mothers	Chicago, Ill.
Vice-President	Mrs. L. L. Blankenberg, General Federation of Women's Clubs	Philadelphia, Pa.
Secretary	Mrs. Louis Hertz, Chairman, California State Joint Committee, 2647 Pierce St	San Francisco, Cal.

Rural and Agricultural

President	Ernest E. Balcomb, State Normal and Industrial College	Greensboro, N.C.
Vice-President	F. W. Howe, Professor, Syracuse University	Syracuse, N.Y.
Secretary	E. C. Bishop, Schools Section, Iowa State College	Ames, Iowa

*Resigned.

TREASURER'S REPORT

OF THE

NATIONAL EDUCATION ASSOCIATION

JULY 1, 1911, TO JUNE 30, 1912

To the Board of Directors, National Education Association:

In presenting my report to the Board of Directors, I desire first to thank the Secretary, Dr. Irwin Shepard, for his courteous co-operation, willing and able help at all times during my year's work as Treasurer. He is practically the Secretary-Treasurer, or Financial Secretary, of the Association, and the work would be done more satisfactorily, expeditiously, and economically, if that fact were recognized in the By-Laws, and the financial affairs left entirely in the hands of the Secretary, the treasurership abolished, and instead of a Treasurer, a Corresponding Secretary elected whose duty it should be to issue all membership certificates. This, with the President, the Board of Trustees, and the annual audit, would be a quite sufficient check upon the work of the Financial Secretary. Whether this change in the charter is made or not, I believe that all the certificates of membership should be in the hands of the Treasurer or Corresponding Secretary and issued by him. At present we are fortunate in having a Secretary of honesty and ability, but the time might come when we would have a young Napoleon of finance instead of Dr. Irwin Shepard and under present conditions it would be easy for him to materially reduce the income of the Association without detection. I therefore recommend that the membership certificates in future be entirely in the hands of the Treasurer, that the Secretary acknowledge the payment of dues on a printed form stating that the Treasurer will send membership certificate later. This would give the Association a second roll of active members, and as the Treasurer's roll would be kept in a different place from that of the Secretary, it would remove the present danger of having the records completely destroyed in case of fire.

I recommend further that the bond for the Treasurer be reduced to a minimum. The Treasurer at present has no check-book, and cannot draw on the funds of the Association. The $10,000 bond now issued is therefore unnecessarily expensive.

Lastly, I recommend that the present regulation limiting the funds at the disposal of the State Directors to $20 each be amended so as to allow the State Director to draw on the Association for actual expenses incurred to an amount not to exceed 25 per cent of the annual dues of the active members in the state for the year of his administration. I make this recommendation on the advice of several successful business men as being in line with modern business methods. Such a policy would doubtless largely increase the membership and the income of the Association. That the present arrangement is unfair will be borne out by the following statistics of the San Francisco convention:

There were 921 active members present at San Francisco. The expenses of the State Directors aggregated $538.59. This was an average of 58 cents per active member present.

Six states together sent 20 members and the expenses of the six State Directors amounted to $106.50, an average cost of $5.33⅓ per active member present.

6 States	Active Members Present	Expenses State Directors	Average Cost per Active Member
20.....	148	$324.74	$2.19
1*.....	146	20.00	0.13
10.....	42	165.05	3.94
1†.....	42	.....	....

* Eleven of the 20 states sending 148 members lay either on a line with, or west of, the one state sending 146 members to the convention.

† With two exceptions, all of the 10 states sending 42 members lay on a line with, or west of, the one state that sent the same number of members as the 10 put together.

A study of convention figures shows that the attendance at conventions is purely a question of the amount of interest aroused in the several states. You cannot arouse interest in a convention without incurring expenses. The State Directors should not be in their present impecunious condition, but should feel free to spend a reasonable amount in "publicity and promotion," knowing that it will be repaid in the percentage of membership dues. The present allowance of $20 for each State Director, if the funds were all used, would amount to $960. The cost of 25 per cent on active membership dues would have amounted to $3,444.50, according to the figures of 1911. This would be a material increase, but I believe that it would pay for itself in the interest aroused in the different states, and would lift the State Directors from the present necessity of petitioning for money to pay for state headquarters from associations, either state or local, in which they were interested. The National Education Association is big enough to have all its officers freed from the cares that come with lack of funds.

The following is a tabulated statement of the year's receipts and expenditures:

Katherine D. Blake, in Account with the National Education Association

BALANCE ON HAND, JULY 1, 1911			
Balance brought forward from Treasurer's Report for year ending June 30, 1911			$ 4,030.13
RECEIPTS			
From Annual Meeting:			
Advance enrollment—			
From Felton Taylor, received by Treasurer Springer	$10,484.00		
From Felton Taylor, received by Treasurer Blake	934.00		
		$11,418.00	
Convention Registration, received by Treasurer Springer		12,172.00	
Convention Registration, received by Treasurer Blake		37.00	
After Convention Registration, received by Treasurer Springer		917.00	
After Convention Registration, received by Treasurer Blake		205.00	
From Railroads:			
Southern Pacific Company	$732.00		
San Pedro, Los Angeles & Salt Lake Ry	32.00		
Atchison, Topeka & Santa Fe Ry	86.00		
Pacific Navigation Company	102.00		
Nevada, California, Oregon Ry	2.00		
Western Railway Company	2.00		
		956.00	
Total from San Francisco Convention			$25,705.00
From membership, St. Louis Meetings of Department of Superintendence			1,634.00
From Secretary's office during the year:			
Membership fees	$11,548.00		
Enrollment fees	352.00		
Exchange	6.25		
Sale of back volumes	777.33		
Sale of Committee Reports, etc	82.11		
Expressage refunded	12.46		
Convention literature (Boston meeting)	7.01		
		$12,785.16	
From interest on Permanent Fund		7,096.80	
From royalty on sale of Reports of Committees of Ten and Fifteen		33.40	
From interest on deposits in First National Bank of Chicago		351.52	
			$20,266.88
			$51,636.01

DISBURSEMENTS

Board of Trustees:			
For investment		$10,000.00	
For expenses		436.66	
			$10,436.66
Executive Committee expenses:			
President		$226.00	
First Vice-President		189.50	
Treasurer Springer		129.34	
Treasurer Blake		241.24	
Chairman, Board of Trustees		75.05	
Member by election		300.96	
			$1,162.09
General Secretary's office:			
Salary of Secretary		$4,000.00	
Postage		1,895.90	
Telegrams		80.23	
Freight and express		16.60	
Clerical services		3,078.54	
Exchange		3.50	
Stationery and office supplies		86.85	
Traveling		359.95	
Rent		600.00	
Miscellaneous:			
Rent of post-office box	$1.00		
Refund of Report (University of Chicago)	3.69		
Stenographic services (reporting Executive Committee meeting)	19.25		
Reimbursement for check not made good	2.00		
Two Teachers' Directories	4.00		
		$29.94	
			$10,151.51
Printing:			
Volumes of Proceedings (11,500 copies)	$8,505.08		
Yearbooks (7,350 copies)	1,829.18		
		$10,334.26	
Reprints from volume		74.00	
Special Reports (including Proceedings of Department of Superintendence, $541.85)		689.86	
Executive Committee Bulletins (including announcements of Department of Superintendence, $279.35)		1,635.54	
Miscellaneous (letterheads, blanks, envelopes, etc.)		650.35	
			$13,384.01
Express and freight:			
Distribution of volumes and reports		$3,770.51	
Miscellaneous		106.80	
			$3,877.31
Special appropriations:			
Committee on Rural Schools		$838.49	
Committee on Salaries, Tenure, and Pensions		894.71	
Committee on Uniform Records and Reports		282.96	
Committee on Geometry Syllabus in Secondary Schools		300.00	
			$2,316.16
Conventions:			
Department of Superintendence:			
Clerical services:			
Registration		$136.25	
Typewriting		12.00	
Badges		93.31	
Printing:			
Programs		75.00	
Miscellaneous		29.25	
Miscellaneous:			
Expenses of President		62.00	
Sundry expenses of Secretary at headquarters		21.80	
			$429.61
			$41,757.35
Annual Convention:			
Department expenses		$353.61	
State Directors and Managers		538.59	
Carried forward		$892.20	$41,757.35

Brought forward		$892.20	$41,757.35
Clerical services:			
Registration Bureau	$1,200.15		
Stenographers and typewriters	466.00		
		$1,666.15	
Printing:			
Programs		609.20	
Miscellaneous		38.75	
Express and freight		6.05	
Stationery		59.95	
Telegrams		21.86	
Miscellaneous:			
Distribution of Bulletins (James A. Barr)	$367.60		
Postage for departments	4.30		
Rubber stamps	17.10		
Expenses of speaker	200.00		
Sundry expenses	100.77		
		$ 869.77	
			$3,983.93
Unclassified disbursements:			
Auditing books of Secretary and Treasurer		$ 30.00	
Examination of securities		25.00	
Office furniture		19.20	
Press clippings		115.80	
Refunds of irregular membership fees		73.00	
Purchase of back volumes		19.00	
Bonds of Secretary and Treasurer		50.00	
Expense sending delegate to meeting Mexican Centennial		100.00	
Exchange of typewriters at Secretary's office		50.00	
Copies of Reports (International Audit Company)		30.00	
			$512.00
			$46,253.28

SUMMARY

Receipts

Balance brought forward from the Treasurer's report for year ending June 30, 1911	$ 4,030.13	
Receipts for year July 1, 1911, to June 30, 1912	47,595.88	
		$51,636.01

Disbursements

Total expenses for the year	$36,253.28	
Transferred to the Permanent Fund	$10,000.00	
		$46,253.28
Balance in treasury, June 30, 1912		$5,382.73

Respectfully submitted,
KATHERINE D. BLAKE, *Treasurer*

To the Board of Trustees, National Education Association of the United States:

We have audited the books of the National Education Association of the United States, and the accounts of the Treasurer, Katherine D. Blake, and the Secretary, Irwin Shepard, for the year ended June 30, 1912. We hereby certify that the foregoing statement of Receipts and Disbursements is in accordance with the books and is correct.

MARWICK, MITCHELL, PEAT & COMPANY
Chartered Accountants

July 5, 1912

TWENTY-SIXTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION

FOR THE YEAR JULY 1, 1911, TO JUNE 30, 1912

CHICAGO, ILLINOIS, July 6, 1912

To the Board of Directors of the National Education Association:

The Board of Trustees of the National Education Association has the honor to submit for your information its report on the Permanent Fund of the Association for the year ending June 30, 1912.

The several amounts collected as income from the Permanent Fund, and the disposition made of the same, are shown in detail in the Income Account. The amount of the net income paid to the Treasurer of the Association is $7,096.80.

During the year the sum of $10,000 has been added to the Principal of the Fund in accordance with the provisions of Article 7 of the Act of Incorporation.

The Permanent Fund invested now amounts to $190,000 including, cash on hand awaiting investment, June 30, 1912, $3,397.50.

New investment for the fund as shown in the Principal Account consists of $10,000 Kansas City, Mo., School Bonds falling due 1925, purchased at 95 per cent, and bearing 3½ per cent interest payable semi-annually.

The report shows a complete statement of the securities held for the Permanent Fund, June 30, 1912.

Statement A shows the gross income of the property at 4762 Lake Avenue, Chicago, to be $360 and the disbursements $207.20, leaving a net income of $152.80, an increase of $113.82 over the previous year.

The account and statements which follow set forth in detail the financial operations of the year and the present state of the Permanent Fund:

REPORT OF THE FUNDS OF THE NATIONAL EDUCATION ASSOCIATION

FROM JULY 1, 1911, TO JUNE 30, 1912

PRINCIPAL ACCOUNT

RECEIPTS

Cash on hand for investment June 30, 1911	$ 397.50
Village of Morgan Park, Ill., bonds due November 1, 1911	2,500.00
J. M. Greenwood, Chairman, Board of Trustees	10,000.00
	$12,897.50

DISBURSEMENTS

$10,000 Kansas City, Mo., School District 3½ per cent bonds at 95	$ 9,500.00
Cash on hand awaiting investment June 30, 1912	3,397.50
	$12,897.50

INCOME ACCOUNT

RECEIPTS

$ 7,000	St. Louis and San Francisco R.R. Co. refunding bonds, 1951, at 4 per cent	$ 280.00
15,000	Terminal R.R. Association of St. Louis general refunding bonds, 1953, at 4 per cent	600.00
20,000	Pittsburgh, Lake Erie and West Virginia System refunding bonds, 1941, at 4 per cent	800.00
10,000	Oregon Short Line R.R. Co. guaranteed refunding bonds, 1929, at 4 per cent	400.00
17,000	City of New York registered bonds, 1957, at 4½ per cent	765.00
2,500	Village of Morgan Park, Ill., gold bonds, 1911 at 4½ per cent	56.25
1,000	Village of Morgan Park, Ill., gold bonds, 1913 at 4½ per cent	45.00
	Carried forward	$2,946.25

	Brought forward	$2,946.25
1,000	Lemont, Ill., school bonds, 1912–13, at 5 per cent	50.00
10,000	Chicago Sanitary District bonds, 1916 } at 4 per cent	2,000.00
40,000	Chicago Sanitary District bonds, 1917 }	
9,000	West Chicago, Ill., park bonds, 1918 } at 4 per cent	760.00
10,000	West Chicago, Ill., park bonds, 1919 }	
10,000	Pennsylvania R.R. Co. convertible bonds, 1915, at 3½ per cent	350.00
10,000	Atlantic Coast Line R.R. first consolidated bonds, 1952, at 4 per cent	400.00
10,000	Chicago, Indiana and Southern Railway Co. guaranteed consolidated bonds, 1956, at 4 per cent	400.00
4,000	Manhattan Ry. Co. consolidated mortgage bonds, 1990, at 4 per cent	160.00
	Interest on cash balance in First Trust and Savings Bank, Chicago	98.38
	Accrued interest on Kansas City, Mo., bonds (advanced by Dr. Greenwood)	156.53
	Net income of property 4762 Lake Avenue, Chicago (see Statement A)	152.80
		$7,473.96

DISBURSEMENTS

Fee of First Trust and Savings Bank, Chicago, Ill., for care of principal of Permanent Fund	$ 220.63
Accrued interest on $10,000 Kansas City, Mo., School District bonds purchased	156.53
Net income paid to the Treasurer of the National Education Association (refunded)	7,096.80
	$7,473.96

STATEMENT A

REAL ESTATE ACCOUNT

RECEIPTS

Rents received by First Trust and Savings Bank, Chicago, Ill	$ 360.00

DISBURSEMENTS

Taxes for 1911	$ 84.05
Special assessment (paving 47th Street)	1.85
Special assessment (paving Lake Avenue)	27.65
Repairs	75.65
Fee of 5 per cent of First Trust and Savings Bank on $360 rents collected	18.00
Net income	152.80
	$ 360.00

STATEMENT OF SECURITIES HELD FOR THE PERMANENT FUND

JUNE 30, 1912

MUNICIPAL AND SCHOOL BONDS

Par Value	Security	Acquired	Interest	Book Value
$ 8,000	City of New York registered gold bonds, due November 1, 1957, Nos. 554 to 561	February 29, 1908	4½% May and Nov.	$ 8,510
9,000	City of New York gold bonds due Nov. 1, 1957, Nos. 26816 to 26824	June 12, 1908	4½% May and Nov.	9,810
1,000	Village of Morgan Park, Ill., golds bonds due July 1, 1913, Nos. 4 and 5, Series o.	1895	4½% Jan. and July	1,000
1,000	Lemont, Ill., school bonds, Nos. 30 and 32, payable $500 Dec. 1, 1912, and Dec. 1, 1913	1897	5% June and Dec.	1,000
10,000	Sanitary District of Chicago drainage bonds, Nos. 24516 to 24525, due Dec. 1, 1916.	1905	4% June and Dec.	10,000
40,000	Sanitary District of Chicago drainage bonds, Nos. 24591 to 24625 to 24636 to 24640, due Dec. 1, 1917	1904	4% June and Dec.	40,000
9,000	West Chicago park bonds, Nos. 1101 to 1109, due April 1, 1918	July 31, 1906	4% April and Oct.	9,045
10,000	West Chicago park bonds, Nos. 615, 629–31, 1243–48, due April 1, 1919	July 31, 1906	4% April and Oct.	10,075
10,000	Kansas City, Mo., School Dist. Bonds, Nos. 3127–29, 3133, 3135–36, 3190–92 and 3200, due July 1, 1925	June 12, 1912	3½% Jan. and July	9,500
$98,000				$98.940

RAILROAD BONDS

Par Value	Security	Acquired	Interest	Book Value
$ 7,000	St. Louis and San Francisco R.R. Co., refunding gold bonds Nos. 47435, 47457, 47537, 49012, 49070, 57373, 57514, due July 1, 1951...	January 3, 1907	4% Jan. and July	$ 5,775
15,000	Terminal R.R. Association of St. Louis, general refunding sinking fund gold bonds, Nos. 16311–16325, due January 1, 1953.....	January 30, 1905	4% Jan. and July	15,050
20,000	Pittsburgh, Lake Erie and West Virginia System refunding gold bonds Nos. 13496–13500, 21236–21250, due Nov. 1, 1941.....	January 13, 1906	4% May and Nov.	19,942.50
10,000	Oregon Short Line R.R. Co., guaranteed refunding gold bonds, Nos. 4013–4017, 4025–4027, 4976, 13810, due Dec. 1, 1929.....	February 3, 1908	4% June and Dec.	8,895
10,000	Pennsylvania R.R. Co., convertible bonds, Nos. B-22823 to B-22838 inclusive, B-27655, B-27671, B-27672 and B-11258, due Oct. 1, 1915.....	January 11, 1909	3½% June and Dec.	9,500
10,000	Chicago, Indiana and Southern Railway Co. bonds, Nos. 11386 to 11394 inclusive and 13786, due Jan. 1, 1956.....	January 18, 1909	4% Jan. and July	9,500
10,000	Atlantic Coast Line Railroad Co., 1st. Cons. bonds Nos. 5130, 6494, 11638, 11639, 14335, 14339, 17579, 24601, 37565, and 50251, due July 1, 1952.....	{ August 3, 1909 / June 5, 1911 }	4% March and Sept.	9,600
4,000	Manhattan Railway Co. Cons. mortgage gold bonds, Nos. 2843, 6522, 16083 and 16087, due April 1, 1990.....	June 5, 1911	4% April and Oct.	3,900
$86,000				$82,162.50

REAL ESTATE

Security	Acquired	Interest	Book Value
4762 Lake Ave., Chicago, Ill. (Hord property).....	1907	Rent $30 monthly	$ 5,500

Cash on hand awaiting investment..... $ 3,397.50

Total of the Permanent Fund..... $ 190,000

Respectfully submitted,

JAMES M. GREENWOOD, *Chairman*
JAMES Y. JOYNER
J. STANLEY BROWN
ROBERT J. ALEY, *Secretary*
CARROLL G. PEARSE
Board of Trustees

To the Trustees of the National Education Association:

GENTLEMEN: The above and foregoing is a correct statement of the account of the funds of the National Education Association of the United States as the same appears on the books of this bank.

First Trust and Savings Bank,
Chicago, Ill., June 27, 1912 (Signed) By LOUIS BOISOT, *Trust Officer*

To the Board of Directors, The National Education Association of the United States:

We have examined the books and records of the Board of Trustees of the National Education Association of the United States, and certify that, in our opinion, the foregoing statement correctly reflects the condition of the Permanent Fund as at June 30, 1912. We also certify that we have this day examined the securities listed in the foregoing statement, deposited in the custody of the First Trust and Savings Bank of Chicago, Illinois.

MARWICK, MITCHELL, PEAT & COMPANY
Chartered Accountants
July 5, 1912

MINUTES OF THE MEETING OF ACTIVE MEMBERS OF THE NATIONAL EDUCATION ASSOCIATION FOR THE YEAR 1911–12

CHICAGO, ILL., WEDNESDAY, JULY 10, 1912

The annual meeting of the active members for the election of officers and other business was called to order at the Auditorium Theater by President Carroll G. Pearse at 11:15 A.M., July 10, 1912.

PRESIDENT PEARSE: The first item in the order of business is the reading of the minutes of the last meeting.

SECRETARY SHEPARD: The minutes of the last meeting were printed in the last annual volume and *Yearbook* and have been distributed to the members. Is it desired that they be read at this time?

On motion it was ordered that the reading of the minutes be dispensed with and that they be approved as printed in the volume and *Yearbook* for 1911.

PRESIDENT PEARSE: The next item in the order of business is the report of the Board of Trustees.

James M. Greenwood, of Kansas City, chairman of the Board of Trustees, presented the report of the Board of Trustees with the statement that it was printed and in the hands of all present.

There being no questions asked, on motion, duly seconded, it was ordered that the report of the Board of Trustees be accepted and adopted and printed in the volume of *Proceedings* and *Yearbook*, for the current year.

PRESIDENT PEARSE: The report of the Treasurer, Miss Katherine D. Blake, is next in order.

KATHERINE D. BLAKE, of New York City, Treasurer: As the report is printed and is in your hands, I will spare you any statistics and will merely say that in the report I have made several recommendations. One is that the Treasurer hereafter hold all the membership certificates and that the Secretary acknowledge the payment of dues on a printed form stating that the Treasurer will send membership certificate later. I also recommend that the bond of the Treasurer be reduced to a minimum. I state also that I think that the State Directors ought to be able to pay for headquarters without petitioning other associations.

On motion, duly seconded, the report of the Treasurer was accepted and adopted and ordered printed.

PRESIDENT PEARSE: The next item in the order of business is the "Statement of the Work and Proposals" of the Committee on Teachers' Salaries and Cost of Living, from December, 1911, to July, 1912. President Joseph Swain, who is chairman of the committee, will read a proposed resolution.

JOSEPH SWAIN, Swarthmore, Pa.: The members have printed copies of the report. I wish to quote a few paragraphs from the report. We ask the passage of the following resolutions:

Be it resolved, I. That the National Education Association approves the proposed International Commission on the Cost of Living, and authorizes the Committee on Teachers' Salaries and Cost of Living to take all proper steps to bring this matter effectively to the attention of Congress and the President of the United States.

II. We also ask the passage of a resolution to be presented Wednesday, July 10, providing the necessary financial means for the continuance of the work of the committee as outlined above, and for the publication and distribution of the data thus secured.

Mr. GREENWOOD: I wish to move the adoption of the resolution read by President Swain, if the motion is in order.

PRESIDENT PEARSE: The motion is in order and is seconded. I am asked by President Swain to recognize two members of the committee, Miss Strachan and Miss Haley.

GRACE C. STRACHAN, of New York City: At the request of President Swain I wish to say a few words in regard to this resolution: That a further appropriation of three thousand dollars be made to conduct this work. I suppose the fact that for six years we have been working for better salaries for teachers justifies my asking your support of this resolution. We are not afraid when we speak of salaries that we shall be accused, as teachers, of speaking only of our pocketbooks. I think everybody who gives the matter a moment's thought realizes that the teacher will do his best work when not oppressed by the weight of extra work in connection with the struggle to make both ends meet.

The other parts of the work submitted to this committee, those dealing with tenure and pension, I think are of vital interest to every member of our profession. During the six years' fight by sixteen thousand women in the city of New York, I am probably the only woman who feared that she might lose her position. You can, therefore, understand that the New York teachers can be independent and can wage a fight in opposition to their own board of education and all others. In New York City we have secured by act of legislature security of tenure. Any teacher who has completed three years of service that is recognized as satisfactory is sure of his or her position and cannot be removed except on charges, and those charges must be general inefficiency, insubordination, or gross misconduct. You will be interested to know that for some years marriage seemed to be considered gross misconduct. The board of education had in its by-laws said that when a female teacher married the act constituted resignation. That went on and was obeyed by hundreds of female teachers for years, and then a teacher married who thought, "Why do I lose my position? The state law says that I shall not, since I have a permanent license, unless guilty of general inefficiency, insubordination, or gross misconduct." So she got a lawyer and took the case to the courts. The records showed that she was very efficient and so there was nothing that she could be charged as guilty of, except of gross misconduct. The judge, I believe, was a married man. You can readily see what the result was. So, now, teachers can marry and remain in the system if they choose to do so. The reason that my position was not secure is that I was elected for a term and my term expiring during the fight, the board might refuse to re-elect me.

I mention the tenure because I think one of the most desirable positions, especially in a teacher, is that of being free and independent and you cannot be free and independent and stand for your ideals and your position if you fear losing your position.

The matter of pensions needs no explanation or advocacy. We all realize that our profession is one that limits us generally to a salary which, as yet, is very inadequate and therefore we should be protected in the future of our lives after giving up teaching, so that we need not worry. I therefore hope that there will be a unanimous support given to the resolution offered by President Swain.

MARGARET HALEY, of Chicago: Mr. President and members of the Association: I am sure that the Chicago teachers rejoice with the teachers of the United States that it is in our city that we receive the first report that has come before the National Education Association—I mean the Association as a whole—on this question of salaries, tenure of office, and pensions. The resolution creating the committee was presented at San Francisco last year and we who have been working for more than ten years to get this resolution before the National Education Association rejoiced when it passed. We rejoice this morning to see the unanimity that we have in the approval of the report and the extension of the work as proposed. I believe there is no subject today that needs more attention from educational bodies than the question of the teachers' condition of living and working. I believe our first duty is not the expounding of theories, but the finding of better conditions for the people who are trying to improve the conditions under

which our teachers work. Our reports show that the standard of living and therefore the standard of efficiency of the teaching force has been lowered. When you lower the standard of living you lower the standard of efficiency and the public schools are suffering with the teachers. We hope that you will adopt this report and that you will not only adopt the report, but that you will also bring to the attention of the teachers of the United States, when you go back, the fact that this National Education Association has taken up the subject of tenure of office, pensions, and other questions vitally connected with living; especially the question whether the increase in salaries has kept pace with the increase in the cost of living.

I feel that you understand this question so well that I need say no more, except a word to urge the teachers to bring these subjects before your officials, your board of education, and thus complete a great and splendid piece of work. I thank you.

PRESIDENT PEARSE: You have heard the motion of Mr. Greenwood to adopt the resolution of Chairman Swain. He informs me of his knowledge that the Committee on Investigations and Appropriations will have no further meeting during the session. You have heard the motion, which motion has been seconded and has been spoken to by Miss Strachan and Miss Haley. If there are no further remarks, those in favor of the adoption of the motion will say Aye.

The motion was carried unanimously.

PRESIDENT PEARSE: The next item on the program is the report of the Committee on Nominations, of which President Robert J. Aley is chairman.

MISS BLAKE: Before that report is made I request that the unfinished business come before this house. It is customary in most organizations—I think parliamentary practice will prove that I am right—to transact all business before electing officers. I ask this because I should like to have a chance to show exactly where we stand on the By-Laws. I move, Mr. President, that we take from the table the By-Laws that were presented at San Francisco last summer.

The motion was seconded by various members.

PRESIDENT PEARSE: The motion has been made and seconded that we depart from the regular order, the order which is customary in the National Education Association business meeting, and that we now take up the item of unfinished business.

WILLIAM H. CHAMBERLIN, of Chicago: I beg to offer this suggestion, that these By-Laws are quite extensive in the amendments proposed. There will no doubt be debate. It is a question whether we can reach a conclusion or a vote on these proposed amendments in today's session. Some of them may have to go over to another session. It appears to me that the election of officers would be the better procedure and I move that this motion be laid on the table.

The motion was seconded.

HANNA WEHLE, of New York City: There is a motion before the house now, and I rise to a point of order.

PRESIDENT PEARSE: A motion has been made to take up the unfinished business out of its order. The Chair will rule that this special motion to lay the first motion upon the table is in order. The motion to lay on the table is not debatable. As many as favor the motion to lay on the table will say Aye. Those opposed will say No. The motion to lay on the table appears to be carried; it is carried. We will now have the report of the Committee on Nominations.

ROBERT J. ALEY, of Orono, Me.:

To the President and Active Members of the National Education Association:

Your Committee on Nominations presents the following report:

For *President*	EDWARD T. FAIRCHILD	Kansas
For *Treasurer*	GRACE M. SHEPHERD	Idaho
For *Vice-Presidents*	CARROLL G. PEARSE	Wisconsin
	GUY POTTER BENTON	Vermont

For *Vice-Presidents*	Martha Stromberg	Maryland
	Waitman T. Barbe	West Virginia
	B. W. Torreyson	Arkansas
	Helen M. Wixson	Colorado
	L. R. Alderman	Oregon
	Agnes E. Howe	California
	Ada Van Stone Harris	Virginia
	Amelia C. Fruchte	Missouri
	Cornelia S. Hulst	Michigan
For State Directors:		
Alabama	John H. Phillips	Birmingham
Arizona	A. J. Matthews	Tempe
Arkansas	George B. Cook	Little Rock
California	A. J. Cloud	San Francisco
Colorado	James B. Ragan	Sterling
Connecticut	Walter D. Hood	Winsted
Delaware	George W. Twitmyer	Wilmington
District of Columbia	William M. Davidson	Washington
Florida	Clem Hampton	Tallahassee
Georgia	Aubrey Matthews	Gainesville
Idaho	Walter R. Siders	Pocatello
Illinois	William H. Campbell	Chicago
Indiana	Thomas A. Mott	Richmond
Iowa	O. P. Bostwick	Clinton
Kansas	John MacDonald	Topeka
Kentucky	J. G. Crabbe	Richmond
Louisiana	T. H. Harris	Baton Rouge
Maine	Robert J. Aley	Orono
Maryland	Charles J. Koch	Baltimore
Massachusetts	Robert J. Fuller	North Attleboro
Michigan	E. E. Scribner	Ishpeming
Minnesota	Julia H. Vaughan	Minneapolis
Mississippi	E. E. Bass	Greenville
Missouri	William P. Evans	Jefferson
Montana	Ward H. Nye	Billings
Nebraska	James E. Delzell	Lincoln
Nevada	Walter J. Hunting	Carson City
New Hampshire	Henry C. Morrison	Concord
New Jersey	Calvin N. Kendall	Trenton
New Mexico	W. E. Garrison	Agri. College
New York	George M. Forbes	Rochester
North Carolina	F. M. Harper	Raleigh
North Dakota	George A. McFarland	Valley City
Ohio	J. F. Smith	Findlay
Oklahoma	W. A. Brandenburg	Oklahoma City
Oregon	Grace DeGraff	Portland
Pennsylvania	Reed B. Teitrick	Harrisburg
Rhode Island	George F. Weston	Providence
South Carolina	D. B. Johnson	Rock Hill
South Dakota	C. G. Lawrence	Pierre
Tennessee	J. J. Keyes	Nashville
Texas	William B. Bizzell	Denton
Utah	G. N. Child	Salt Lake City
Vermont	Guy Potter Benton	Burlington
Virginia	Maurice M. Lynch	Winchester
Washington	C. E. Beach	Olympia
West Virginia	M. P. Shawkey	Charleston
Wisconsin	L. P. Benezet	La Crosse
Wyoming	M. E. Shuck	Rawlins
Hawaii	Willis T. Pope	Honolulu
Philippine Islands	G. N. Anderson	Manila

Respectfully submitted,

Robert J. Aley, *Chairman*

A Member: Mr. Chairman, I move that the Secretary be instructed to cast the ballot of the Association for the officers named by the committee.

The motion was seconded.

PRESIDENT PEARSE: You have heard the motion as made and seconded.

MISS BLAKE: Mr. President, I wish to enter objection to that motion. One objection will stop that motion, I believe.

PRESIDENT PEARSE: Yes.

MISS BLAKE: I desire to make a motion to substitute in place of the name of Mr. E. T. Fairchild of Kansas the name of Miss Grace C. Strachan, of New York.

Many seconded the motion.

PRESIDENT PEARSE: You have heard the motion to amend.

MISS BLAKE: I wish to speak on my motion before a vote is taken. I think that Americans as a rule stand for fair play. I feel proud, friends, very proud, that two years ago I had the honor of nominating in Boston your own superintendent and of making before the audience of active members of the Association the nomination of Mrs. Young as President of the Association. You found then that the only way that the name of a woman for a high office in this Association could be brought before this body was by a substitute motion. We were told in San Francisco that the only way that a woman's name could be brought before the body was by a substitute motion and it was so proved. We have been told here that the only way that a woman's name can come before this organization is by a substitute motion and it has again so been proved.

A MEMBER: No, it has not been so proved.

MISS BLAKE: I said for a high office. In presenting Miss Strachan's name here I present the name of the member who has done the biggest piece of educational work that has been done for a long time. In gaining equal pay for the teachers of New York City she gained what is far greater than a political victory—an economic victory. As the representative of the teachers of her own organization she, more than anyone else, accomplished that work. In her report this morning she was too modest to tell you that she was the only one of the members of that organization who stood in any danger. She did not tell you of the abuse and threats that met her in that work. She refrained from saying to you that in order that this great work might be carried on, and because she was standing for a principle, she worked against an increase of salary for herself. For the past three years she has received $1,000 a year less than she would have received had she worked for herself instead of for the classroom teachers. I think that is a record that is pretty hard to match. It was Miss Strachan alone of all the district superintendents who stood for the continuance of the $5,000 salary instead of for the raise to $6,000, because she would not have her salary raised until the classroom teacher received adequate compensation for her work.

Friends, in presenting the name of Miss Strachan, I present the name of a leader in educational affairs. This organization needs a leader into new paths. Miss Strachan can be that leader. In the schools she has always been a leader; in school associations she is a leader, and she has been a leader in the charity work of her city. She has the mind to grasp new issues and to meet them.

Things have been said here which I think you will all deplore later, because intentions have been misinterpreted. In the heat of debate even friends sometimes misunderstand each other. Miss Strachan has not been asked for her position on the By-Laws. It was for that reason that I tried to bring the By-Laws before you a few minutes ago, so that you could hear from her own lips where she stood. I am sorry that you did not vote to allow her. I am sorry that you were unwilling to discuss the By-Laws and thus give her a chance to show you her attitude in reference to them.

Friends, Miss Strachan stands not merely for the uplifting of the teacher thru her salary. She has under her care thirty thousand children in New York City. She has one of the most progressive districts, one of the best districts in the city, and one of the freest. Her teachers are happy and enthusiastic under her. They are free to do as they like. Initiative is not repressed. Miss Strachan stands for individual liberty, for the friendly

comradeship of teacher and child. In her district, if you choose to visit it, you will find classes for the blind, for the anæmic, for the crippled, for the deaf, for the defective, as well as the most advanced and progressive work for the normal child. Miss Strachan is a leader in the vanguard of school work. In asking you to give your votes for Miss Grace C. Strachan today, I am asking you to do honor to this body. I am not asking you to honor her—she needs no further honor. This Association is coming, to a certain extent, to the parting of the ways. We must in the future travel a different path from that of the past. You need a wonderful organizer. In Miss Strachan you have a wonderful organizer. She has organized the biggest teachers' organization in the world, with a paid-up membership of fourteen thousand members in it. Miss Strachan has worked in harmony with friends, and with people who seemed not like friends, in New York, and has brought order out of chaos and we want votes for her for that reason also.

I nominate Miss Strachan for the presidency of the greatest educational organization in existence today, and I so nominate her hoping that this National Education Association will not fail to elect her and that the women of this organization will honor themselves in honoring her.

Thomas W. Bicknell, of Rhode Island: Mr. President, there are a few points concerning which I wish to say a word. I have met here today a great many members whom I have never met before and I congratulate the Association upon its splendid condition and its splendid prospects for the future. Among those distinguished people who have come to my attention has been Miss Grace C. Strachan, of New York; of great ability, of great organizing power, and of great strength in very many directions, and if she lives and if this Association lives, it is certain that she will stand at its head. But today, as a friend of this lady so distinguished, I, for one, representing the past of the Association as well as the present, feel that the hour has come for a continued policy along the lines laid down by those who have led in the past and who have been great in service to this Association.

Miss Strachan appears for the first time here, and she is a splendid representative of our work and of her own efficiency. But I think that in our present position she, as a leader, can afford to wait; that she had better wait for another time and another occasion. My voice and my influence at some time in the next few years will be raised for her; but I believe that we should recognize the regular order of procedure at this convention. I believe that the report of this regularly appointed committee which we have named from the many states should be adopted.

Miss Blake: There was to be a minority report, but we have moved to amend the majority report. I have the minority report here.

Mr. Bicknell: The majority report recognized one of the great men of the states; and his name stands known and recognized. I, for one, feel it my duty to say that while I would most gladly vote for Miss Strachan under other conditions, under the present conditions I must vote for Mr. Fairchild, of Kansas.

There were calls for "the question"; President Pearse asked if there were any other remarks.

Mathilde C. Ford, of the Department of Finance, New York City: Like my friend who has just spoken, I too have been facing the past until a few weeks ago when I stood on Fifth Avenue and watched the women parade. Up to that time I had never had any enthusiasm over the suffrage movement but as I stood there I felt myself quivering with emotion and seemed to have a vision of the women of the future. And so I leave my chair and come forward to speak a word for Miss Grace C. Strachan because she, more than any other woman whom I have met in my far-reaching contact with the teachers of this country, seems to represent this new and coming order of things.

Being outside the school system and therefore able to speak impartially, I desire, with Miss Strachan's permission, to make one or two apologies. It is rather a delicate task but I feel that in the light of all that has happened it is due to our friends in Chicago.

First, I want to apologize for Miss Strachan's having called upon His Honor the Mayor, and in explanation to say that at home she is so accustomed to associating with the mayor, the governor, and the members of the legislature that she did not deem it a crime to call upon the mayor when she came to Chicago.

If my dear friends, the New York teachers, will forgive me, I desire to offer an apology for them also. I had never attended a meeting of their Interborough Association of Women Teachers until three weeks ago when a representative from Chicago came to New York to ask Miss Strachan to withdraw from this race. After hearing what this representative had to say I asked permission to attend a special meeting of that association which had been called to consider the matter. It was granted. We are more generous in many ways—pardon me—than you are in Chicago. I could not get into the caucus where your deliberations were held, but since coming into this meeting I have been called outside and taken behind the curtain. I said, "Come out into the open, we don't do business in New York behind a curtain." In educational politics as well as in national politics, the time has come when nothing short of publicity will win. Publicity is the corrective force in the social body and I predict that from this time on no candidate, whether in a political or an educational convention, can win by any other method than full and free publicity.

To continue my story, I attended the meeting of the Interborough Association and heard Miss Strachan assert that she did not want to be a candidate for the presidency of the National Education Association. She is not seeking honors. She is overloaded with them at home. How, then, does she come to be a candidate? Let me tell you. I have witnessed a quickening of the spirit in the educational world during recent months and I came to this meeting hoping to find it in evidence here. The moving picture is destined to become the greatest educational instrument since the invention of the printing press. The Montessori method of which we heard yesterday is going to revolutionize the work of teaching young children. Now it would appear that Miss Strachan has invented a Montessori method of handling teachers. She keeps herself in the background and allows them self-expression. They said, "We want you to be a candidate; we want you to go to Chicago as the representative of the teachers of New York City." If there has been any lack of finesse on the part of these young women who have conducted her campaign it has been because they were expressing their new-found freedom without interference.

In presenting the name of Miss Strachan for President, we also desire to apologize for her not having been active in the Association for the past twenty-five years. It is not her fault that she is not old enough for this. Despite her alleged lack of years, she has done most extraordinary educational work and to an unprecedented degree she has become a leader among women. And so I ask you to vote for her.

Calls for "the question."

PRESIDENT PEARSE: The Chair feels that the Association—altho it is warm and altho we have much business—can afford to take a few minutes more. We can well afford to be courteous to the sisters from New York. I believe that Miss Stromberg desires the floor. She shall have it unless the house forbids.

MARTHA STROMBERG, of Baltimore, Md.: Mr. Bicknell acknowledges Miss Strachan's great abilities, but he says, use them in the future. Why not use these great abilities at once? Why put off for tomorrow what you can do today? Everybody acknowledges that this is a time when we need great talent. Why not then use all this great talent and these great abilites of Miss Grace C. Strachan?

PRESIDENT PEARSE: The Chair desires to state, in the matter of the publicity which has been referred to, that every arrangement has been made to procure the fullest publicity for the proceedings of this meeting; as an evidence, please notice the representatives of the press of the nation, seated at my left.

MARY O'REILLEY, of Chicago: I ask for the floor to say that the teachers really

have not heard all that they want to hear. I, for one, would like to hear from the candidates and how they stand on the amendments. I hope that the house will not call for the question and will not cut off debate until we have heard from Miss Strachan and from Mr. Fairchild on the amendments. We are not here to vote on anybody's personality. It has been said that Miss Strachan has not had an opportunity to declare herself on the amendments.

MISS HALEY: I rise to a point of order.

PRESIDENT PEARSE: State it, please.

MISS HALEY: The point of order is that the question as to how the candidates stand on these amendments is not a pertinent question at this time. The subject of the amendments should come later.

PRESIDENT PEARSE: Will Miss O'Reilley continue?

MISS O'REILLEY: I continue in my request that the members of the organization should be allowed to know how the candidates stand.

MISS STRACHAN: There are some things that I think should be explained before any vote is taken at this meeting. Somebody said to President Pearse that she wanted Miss Strachan to speak this morning. He inquired, "In advocacy of her own election?" I am not speaking "in advocacy of my own election." Those who know me know that my chief desire always is for *truth*. So many things have been said, so many charges made—in the press and elsewhere—that I want to clear the atmosphere, if possible, by stating some facts. I do not want any person to vote for me who has the slightest doubt as to the truth of these charges.

I am sorry to say I am not so young as Mrs. Ford thinks I am. I first attended a convention of the National Education Association in 1891, twenty-one years ago. I have attended many of the conventions since. No doubt in those early years, like so many of the women members, I was an associate member. But I have attended conventions. I went to see if I could find anything better about the teaching of mathematics, to see what I could learn about the exceptional child, and so on. I confess that, altho according to the *Yearbook*, I have been an active member since 1903, I have never spoken from the platform at the business meetings except in 1910 when I took the platform to advocate the election of Mrs. Young, of Chicago. I do not regret that action. Miss Blake, of New York, had in obedience to the instruction of the New York committee in Boston, made the minority report in favor of Mrs. Young. I took the platform to second it. As you know, the report of the nominating committee was set aside, for the first time in the history of the Association, and Mrs. Young was elected. If for supporting her in that convention I am—as has been charged—the candidate of the "Old Guard," I must acknowledge that the "Old Guard" is very generous.

When I went to Boston I went simply and solely, I confess, to work for the election of Mrs. Young and I took New York teachers with me for that purpose. Our Association had appropriated money enough to send ten of us to Boston and pay our expenses there for that purpose. Beside that, we had sent to every school in New York—and there are 520 of them—a letter requesting teachers to go to Boston and aid in the election of Mrs. Young of Chicago; and I am told that there were eighty of us there from New York City. I felt that since the majority of the members of this Association were women, and that since the greater part of the money in the treasury of this Association was contributed by women, it was not asking too much that for the first time in forty-eight years the Association elect a woman President.

I apologize for nothing that was done in Boston by the New York committee. I apologize for nothing that was done in connection with setting aside the report of the nominating committee. We come here to Chicago two years after—I did not attend the convention last year at San Francisco because the legislature in Albany was in session and I remained home to do important work there, but we got up a special party to go to San Francisco to work with Mrs. Young and Miss Blake and the people who have become

known as "Progressives." Now, in Boston, I did not stop to ask, "Are you a member of the Old Guard?" or, "Are you a Progressive?" I did not know who was which, and I did not care at that time. I was there to put into the office of President the person who I thought was best fitted at that time for that position. I do not think that the National Education Association ought to continue this division, if there is one, between the "Progressives" and the "Old Guard." This is a professional association, not a political association. I never heard in Boston about the "Progressives" or about the "Old Guards." I never thought of members as such.

A member of the Hospitality Committee here said to me: "I hope that you are enjoying your stay in Chicago." I said, "I am Scotch-Irish and I am blunt and so I tell you that I am not, and that I think I am not being fairly treated." He said, "How is that?" I said, "I hear indirectly that there is a caucus of the Chicago Principals' Club here at four o'clock. Now, I am the regularly elected director for the state of New York—the state that has the greatest number of active members in this association—and it should not be a question as to whether I am Grace C. Strachan, or whether I am mentioned for office here; but if there is a conference, I should be notified of that and given the privilege either of attending or staying away." He said he was sorry that I felt that way. I confess now I am sorry that I came to Chicago. I would have had a much finer opinion of many people in Chicago if I had stayed away.

However, some members of the New York delegation attended the caucus in the Chicago Principals' Club and the statement was made there, either by President Hall or by Mr. Owen, "Chicago controls the situation. We have—I don't know the exact number of active members—nine hundred or a thousand and if necessary in half an hour can make that figure six thousand." Whereupon one lady who was there said, "Then we'd better change that 'N' in the N.E.A. to 'C.'" Some one made the retort, "If you have the convention in New York, I suppose it will be the 'I.E.A.,'" referring to the Interborough Association of Women Teachers of which I am president. I hope that I have influence enough with my fourteen thousand to prevent their degrading the National Education Association by making it in its business conduct or in its educational departments a catspaw of any local organization in what happens to have been chosen as the meeting-place. For fear that I might not have such control, I shall work hard, if I continue in this Association, to prevent the meeting of the National Education Association in the city of New York or any other large city.

As one of the speakers has said, I was not a willing candidate. I do not seek honors. I accomplished something for teachers that I set out to do, and many thought that I was therefore the logical candidate for the presidency of the National Education Association. Such was my feeling until three weeks ago Sunday. Then a lady came to New York —I am noted for being very frank, it was Miss Haley—and said to Miss Blake and myself and four others at a luncheon at the Waldorf which I had arranged—you need not be in the dark, anything that I do I am perfectly willing to talk about—this lady said, "The National Education Association committee of the Chicago Principals' Club has considered Miss Strachan as a possible candidate for the presidency this year, and has decided that it would be unwise." I do not know how many here will understand why I resented that.

I resented it because Miss Blake, who certainly has fought shoulder to shoulder with "Progressives" since there has been any such name for any portion of this Association, both as Treasurer and as member of the Executive Committee, had not been taken into any conference which should come to that decision. If Miss Blake had come to me and said, "You know, Miss Strachan, that for three years I have been wanting you to be President of the National Education Association, but President Pearse and Mrs. Young and myself, and maybe others, have been talking over the interests of the Association and we have decided that it would be better not to name you this year," I should have been very thankful, very thankful. But to be informed that a club—I am sure I don't know how many members there are in it—the Chicago Principals' Club—I am told that there are men and

women in it, and I am told that Mr. Hall is president—that a very small club consisting of a very small proportion of the membership of the National Education Association had decided whether I could be nominated as a candidate or not, was not to be tolerated. Now the Chicago Principals' Club arrogates too much to itself—you see I am seeking the Chicago vote. Not only does it assume the right to say who shall be the candidate this year, but it has also decided who shall be the candidate next year; and they say I am to be the candidate next year.

The statement has been made over and over again by Chicago teachers to New York teachers that Miss Strachan is against the By-Laws, that Miss Strachan won't say that she is for these amendments, intimating that that has biased their opinion on the presidency. Now that is not true. Miss Haley reported the decision of the Chicago Principals' Club before she showed us the amendments to the By-Laws. Now, how could I have passed my opinion on the amendments to the By-Laws when at that luncheon it was said what the Chicago Principals' Club decision was, before I had had opportunity to pass upon these amendments? When asked why the Chicago Principals' Club had decided Miss Strachan could not be President this year, she said, "The Chicago Principals' Club is very much interested in the By-Laws, but it feels that it should not ask too much." Miss Blake said, "I don't know why the candidacy of Miss Strachan should conflict with the By-Laws," and she said, "Chicago does not feel that it should upset the report of the nominating committee." I said, "That is really funny, coming from Chicago." "However," I said, "let us hurry up with this luncheon and get to those By-Laws. They must be very serious." And we spent the rest of Sunday afternoon studying the By-Laws, or as much of them as we could get into the time.

I suppose I should not talk about By-Laws. Probably I shall be declared out of order. However, the first one is one that was presented by a New York teacher at San Francisco. It is not doubtful what my attitude would be on that. Ever since coming to Chicago I have said to every New York teacher that I could reach, "You must not say what my attitude is on the By-Laws; I will not enter into even the semblance of a deal. I do not want the presidency of this Association so much that I will get it thru any deal. For you to say that you will be for the By-Laws if they will be for me as President is not in my line of conduct in any campaign."

But, however, that is aside from the subject because this decision by the Chicago Principals' Club antedated any discussion of the By-Laws to which I was invited. These amendments to the By-Laws were in press before the messenger came to New York.

Now, here, at that caucus Saturday, it was decided that there should be a caucus on Sunday night at eight o'clock and three men were selected to get attendance at that Sunday evening caucus. One of them happened to be Mr. O'Donnell of New York. I do not know whether that is the reason that that caucus was abandoned. When people went to the Chicago Principals' Club Sunday night at eight o'clock, they found a notice on the door, "Caucus abandoned by mutual consent." I do not know by whose mutual consent it was. Neither do I care, except that I regret that the conduct of the National Education Association has to be decided in caucuses. We learned on Monday morning that later on Sunday night there had been a caucus. We were informed that seventeen states were represented. I assure you that New York was not asked to have a representative there, but it would have been very glad to have had a representative there. There is so much mystery that we cannot find out what states were there.

A MEMBER: Oklahoma was one of them.

MISS STRACHAN: Oklahoma is likely to be in the forefront of everything. However, a Chicago woman member said to a New York woman member after the caucus, when asked if Miss Strachan's name was there presented, "No." Then the New York member said, "Then you asked only those who were opposed to Miss Strachan. But suppose Miss Strachan's name was presented at the annual meeting, could you not vote

for her?" and the Chicago member said, "No, I cannot vote for her because we pledged ourselves at that caucus to vote for Fairchild." It seems to me very much like the unit rule at Baltimore.

If the report of this nominating committee had been made without these previous irregular caucuses, notice of which was not sent to every state headquarters, I possibly might not even have asked for the privilege of explaining some things and would let this active meeting go ahead and vote, even if it were voting in the dark. But I have the reputation of liking the truth, and for wishing to clear the atmosphere, and I do not want any woman or man to vote for me today if she or he stands any way in doubt as to the advisability of doing it.

The silly accusations that are made with reference to my calling on your mayor seem beneath notice. There have been apologies made here this morning for various things. I think that I shall have to apologize to our splendid mayor, Mayor Gaynor, for innocently dragging his name into the inane tactics that seem to permeate this Association. I do not wish Mayor Harrison to have a wrong impression. The papers last week said that I had gone to ask Mayor Harrison to ask Mrs. Young to get the Chicago teachers into line to vote for me. When I saw Mayor Harrison, Miss Blake was with me—Miss Blake, Miss Bayer, Mrs. Ford, and Mrs. Moriarity. We invited him to our reception last night. In Boston the New York committee got up a reception in honor of Mrs. Young, and I with a member of our committee went down to the City Hall to ask Mayor Fitzgerald to attend—to attend the reception in honor of Mrs. Young—and Mayor Fitzgerald did attend and stood nearly two hours in line.

Mayor Harrison said he was sorry we did not ask him sooner. I have since learned that there are some differences in opinion between the Mayor and teachers here.

Again I saw my name associated with the book trust. I have been a superintendent for twelve years; I suppose I might influence the selection of books in my schools. But I should not be afraid to ask every principal, man or woman, that I have ever supervised to take oath as to whether I have ever said, "I wish you would favor so-and-so or would not favor so-and-so." I have no doubt that there are some men connected with book firms who will vote for me. One is the head of the firm of D. C. Heath & Co. He is one of two men at this convention who are privileged to call me Grace. They are privileged by an acquaintance with my people for over twenty years. I know that even some A.B.C. men voted for Mrs. Young. Therefore I am ready to put on record the active members of this Association as to whether they wished to vote for me as the President this year or not. I do not plan for next year. There are hundreds of men and women who went down on the "Titanic" the other night when they thought they were having a party. How foolish it is for any Chicago Principals' Club, for any "Old Guard" or for any "Progressives" to say what we shall do next year.

A MEMBER: I move the previous question.

The motion was seconded by several members.

PRESIDENT PEARSE: It has been moved and seconded that the main question be now put.

MISS BLAKE: I rise to a question of personal privilege. In voting for this, you are voting for the next President of the National Education Association. Mr. President, I have been here for some time and I have heard again and again the statement that Chicago does not want to control this Association. I would request, therefore, that this vote be as it should be, by ballot, and that our Chicago friends who are so willing to let the rest of the country decide and do not want to control, refrain from voting.

Mr. President, I am afraid that that request is misunderstood, I say that I demand that it shall be by ballot, so that no one can be prevented from voting as his or her individual inclination determines.

The Chair ruled that the question of the form of vote and whether by ballot or not should be passed upon by the house at the close of the debate.

MARY A. O'CONNOR, of New York: I seek information. My question is this: In voting on the previous question I should like to know what the vote will be. The second is, What action is necessary with the present motions before the house, and with the present amendments. to obtain the individual vote of this Association on the President?

PRESIDENT PEARSE: The ruling of the Chair is that the first vote is on the previous question—that the questions before the house be put to vote without further debate. After this has been decided, if it is decided in the affirmative, the questions will be put, in their proper order.

MISS BLAKE: Will the Chair state again what will be the result? The first ballot is on the previous question; and if the previous question be ordered when the vote is taken, the debate will cease and the questions before the house will be voted upon in their order; first the amendment, then the main question with or without amendment, as may be decided.

PRESIDENT PEARSE: The first motion was that the Secretary be instructed to cast a ballot for the nominees of the committee—those named in the report of the nominating committee. This was objected to. The question was then on the motion that the report of the Committee on Nominations be adopted. An amendment was made that the name of Miss Grace C. Strachan be substituted for the name of Mr. E. T. Fairchild. Those are the two motions before the house. The unanimous ballot of the house cannot be cast if there is a single objection. The first motion is, Shall debate cease and shall the motions pending be put before the house? If debate ceases, we shall then vote upon the motion to substitute, and then upon the motion to adopt the report of the committee, with or without amendment. Shall the main question be now put?

The motion to close the debate was carried.

PRESIDENT PEARSE: We come now to the vote upon the first question: Shall the name of Miss Grace C. Strachan be substituted for that of Mr. E. T. Fairchild in the nominating committee's report? As many as favor this motion say Aye. As many as oppose it say No.

The vote having been taken by Aye and Nay vote, President Pearse declared that the motion to substitute was lost.

A rising vote was called for.

MISS BLAKE: I will ask for a ballot. It is not fair to ask for people to stand up and be counted when their superior officers do not want them to be counted.

PRESIDENT PEARSE: The vote will be taken as indicated unless there is a different order from the house.

MISS BLAKE: I move that the vote be taken by a ballot.

The motion was seconded.

MR. BICKNELL: I believe that we are proceeding with a ballot and no business can be intruded during that order.

PRESIDENT PEARSE: The Chair does not wish to have the members of the Association feel that they are not having all the privileges that they should have. The question has been raised. Unless a ballot is ordered, we shall proceed in the usual order. All those in favor of the motion to vote by ballot will stand; be seated. Those opposed to the motion to vote by ballot will stand; be seated. The motion to vote by ballot is lost by a large majority.

There were calls for fair play.

PRESIDENT PEARSE: Is there any desire that we proceed further in the discussion of this matter?

MISS O'CONNOR: Mr. President, the point made in calling for the ballot is exactly equivalent to calling for the teachers to stand in favor of the ballot. We know that no teachers will stand in the presence of their superior officers, who may object.

The speaker was interrupted by objections and cries of protest thruout the house.

PRESIDENT PEARSE: The Chair must ask for decorum. Let the lady continue her remarks.

MISS O'CONNOR: The question was not answered by the motion. We asked that the vote be taken by ballot in order that no persons might be intimidated, but placing everybody on record by standing in the vote on that motion, is against its purpose. If we should vote by ballot, we should vote by ballot.

PRESIDENT PEARSE: The question has been put to the house as to whether we shall vote by ballot, and has been decided overwhelmingly in the negative; the Chair is not authorized to assume that the members of the Association are not independent units voting their own convictions. We will continue and the vote will be taken in the manner which has been decided upon. As many as favor the motion to substitute the name of Miss Grace C. Strachan for the name of Mr. E. T. Fairchild, in the nominating committee's report, will stand.

Those in favor of the motion stood.

PRESIDENT PEARSE: The Chair will say that he has not asked for a count, because it does not appear to be necessary. If it is necessary, or anyone desires a count, a count shall be made. Those opposed to the motion will stand.

PRESIDENT PEARSE: The "noes" have it. Is it the desire of anyone in the house that a count be made?

MISS BLAKE: May we see the members vote by states?

PRESIDENT PEARSE: If the house orders the vote to be taken by states it will be so taken.

There were calls of "yes" and "no" from all parts of the house.

MISS BLAKE: In fairness I ask that the vote by states be taken, and so recorded.

PRESIDENT PEARSE: The question is called for.

MISS BLAKE: Then, Mr. President, this meeting will ever be under the accusation of being controlled by Chicago.

PRESIDENT PEARSE: The Chair has only one thing to say. If the house wishes a ballot or a vote by states, the house can have a ballot or a vote by states.

MISS BLAKE: If the house—and Chicago.

PRESIDENT PEARSE: At Boston, where action to which reference has been made today was taken, the vote was taken by standing up and being counted and not by ballot. The question now is on the adoption of the report of Committee on Nominations. Those favoring the adoption of the report will stand up; be seated. Those opposed, stand; be seated.

President Pearse announced that the motion was carried and the report of the Committee on Nominations adopted.

PRESIDENT PEARSE: The next business is the report of the Committee on Resolutions.

JAMES W. CRABTREE, of Wisconsin, Chairman:

The undersigned Committee on Resolutions do hereby offer the following declarations and resolutions:

The National Education Association authorizes the Committee on Teachers' Salaries and Cost of Living to take all necessary steps for bringing its findings effectively to the attention of the Congress and the President of the United States, and urges the committee to render assistance in the movement for an international commission on the cost of living.

We reaffirm our belief in the public schoolhouse and the school playground as social and recreation centers for the use of the school and the community under the control and direction of the school authorities.

We heartily approve of the effort of normal schools and colleges to credit toward graduation, work done in biblical history and biblical literature, provided such work is done in compliance with the laws of the state, and provided all organizations are given the same opportunity to offer such work.

Resolved, That the National Education Association urges the National Bureau of Education, and the school authorities of the various cities and states, to join in a well-

directed effort for increasing teachers' salaries to the point where they will be commensurate with salaries in other professions, and in commercial and industrial pursuits, and to join in the movement for more adequate pension laws for teachers in all grades of work.

We heartily indorse the comprehensive plan now before Congress for increasing the facilities in state colleges of agriculture and mechanic arts, state normal schools, and elementary schools for training in agriculture, domestic economy, and other industrial work for the great mass of our people, thru the public schools of the entire country.

The National Education Association again records its interest in the cause of world-peace, which it regards as one of the great educational movements of the age. The Association especially calls attention to the helpful material prepared by the American School Peace League, which is admirably adapted to the school program. The Association commends most highly the active interest taken by United States Commissioner Philander P. Claxton in disseminating information on the subject, especially in his publication of the "Peace Day Bulletin."

The National Education Association regards the present attempt to establish compulsory military training in the schools of the country, not designed primarily for military training, as reactionary and inconsistent with American ideals and standards.

We believe that the time has arrived when Normal Schools and Teachers' Colleges should give adequate courses of instruction in sex hygiene, with the view, ultimately, of the introduction of similar instruction into the courses of study in the public schools.

The highest and best interests of education in all parts of the country, and the further development of all the agencies of education, both public and private, demand such support of the National Bureau of Education, as to enable it to perform in a more vital and effective way the functions for which it was created. We approve the plans of the commissioner of education for bringing together in the bureau groups of competent men and women to study carefully and thoroly the problems of rural education, city school administration, secondary education in public and private high schools, vocational education, school sanitation and hygiene, and higher education, including the education and training of teachers, and the work of the colleges of agriculture and mechanic arts.

We request and urge the Congress of the United States to appropriate for the use of the bureau such sums of money as may be necessary to make the library of the bureau more generally useful, and to make of the bureau a clearing-house for information on all subjects of common and public interest. In the efforts to make the statistical reports of the bureau more complete and accurate, and to publish them more properly, we pledge the commissioner the support of this Association, and urge all officials of educational institutions of whatever kind to give him their hearty co-operation.

In view of the fact that children are often innocent victims of our present unequal and unjust laws, the National Education Association favors a uniform federal law on all questions of marriage and divorce based upon an amendment of the Federal Constitution.

WHEREAS, The great and grave responsibility of the teachers of our country is the training of the youth to realize the duties, rights, and privileges of citizenship; and

WHEREAS, The ability adequately to accomplish this work demands not only the knowledge of the functions of citizenship, but also the right to exercise them, be it

Resolved, That the Association believes in and urges the granting of the right of suffrage to the women of the United States.

WHEREAS, In spite of the fact that our schools have met well the social and economic problems which have confronted us to date, there has been an ever-increasing demand by the public for greater practical proficiency on the part of our pupils of all ages and grades;

WHEREAS, Such liberal education has, in a measure at least, failed to meet this demand in the opinion of those who judge by results; and

WHEREAS, Many of our formerly well-accepted principles, as well as our educational traditions, are undergoing constant and rapid revision, as a result of the more recent scientific investigation and philosophic readjustments, be it

Resolved, That this Association places itself on record as favoring such changes in the courses of study in our elementary and secondary schools, together with such changes in methods of instruction as shall make it possible to assist the pupil in the ready application of such knowledge as he may acquire to actual life conditions.

WHEREAS, Most of our American vocations are laden with "misfits," due largely to lack of wisdom in the choice of a calling;

WHEREAS, Because of engaging in such ill-adapted occupations there exists a lack of enjoyment in work, appreciation of work, and efficiency in work, resulting in economic waste to both the work and the worker; and

WHEREAS, Other agencies than the public schools have failed to deal with this problem, be it

Resolved, That this Association earnestly urges upon the educational people of this country, as well as upon others who are engaged in social work, the necessity for definite progress along the line of vocational guidance for youth; and that such guidance be carried on under the direct control of a vocational adviser, or expert, who shall be appointed by, and subject to, the control of a council of laymen in the several local communities; and be it further

Resolved, That the courses of study in our elementary schools be so enriched as to make it possible to discover the tastes, tendencies, and abilities of the child previous to the time when such vocational decisions are to be made.

WHEREAS, Vocational choice is inseparable from the several vocations to be pursued;

WHEREAS, The public schools have hitherto left these matters to the solution of the worker and the employer;

WHEREAS, The increasing demands of the occupations of the home, shop, and farm are forcing upon local communities the necessity for some form of vocational training; and

WHEREAS, The United States in order to protect its population, by maintaining its vigor and morality; to change its large output of raw material into an output of finished product; to make it possible to fight not with armored cruisers but with brain and skilled workmanship; and to maintain its commercial prestige, demands some form of vocational training, be it

Resolved, That this Association recommends to the federal government the passage of a law, under conditions clearly recognizing the autonomy of the states in adaptation to local conditions, carrying with it an appropriation sufficiently liberal to render possible its operation, which law shall have for its end the ultimate improvement of the home, shop, and farm thru vocational training; that such aid be administered thru the United States Bureau of Education, or a similar body, thence thru the state board of control of each state to the several local boards of control in the several communities; and that such grants to such local communities and to such states be dependent upon actual results secured in such local communities and such states.

WHEREAS, There exists in this country more than four million young men and young women, fourteen to eighteen years of age, who have been denied the privilege of either vocational guidance or vocational training;

WHEREAS, The only assistance which can be rendered to them, or to those somewhat older, is thru systematic instruction in part-time, continuation, and evening schools;

WHEREAS, Besides reports resulting from the appointment of commissions of child study in several of the states, and discussions by students, there exists little definite knowledge of the needs of these persons of adolescent age, while attempts to solve the problems of their instruction are varied and uncertain, be it

Resolved, That this Association authorizes its President to appoint a committee of eleven members, made up of educators, employers, employees, and social workers, to make a special study of this whole question and to report to this Association at a future meeting; and that an appropriation of $500 be granted this committee for its work in connection with said report.

WHEREAS, The complete development of the individual depends primarily upon his health;

WHEREAS, The physical, social, and moral welfare of the community depends upon the continued and permanent health of the citizens;

WHEREAS, The æsthetic interests of the youth are greatly enhanced by constant contact with the beautiful in nature and in life;

WHEREAS, Recent educational movements have recognized more and more the importance of the utilization of the play instinct in the child;

WHEREAS, It is our belief that insufficient consideration has been given this phase of school on the part of those who have the power to provide school grounds and school sites; and

WHEREAS, Such statistics as are available seem to establish the fact that the location of school buildings in large areas of open country enhance the value of land in the immediate vicinity, be it

Resolved, That this Association urges upon all school districts the importance of providing grounds in proportion to the size of the building, not less than a square rod for each child; such a school district park to provide a place for play, and instruction in gardening as well as a place of recreation for all living in the district.

Frequent and gross instances of lawlessness in all sections of our country impress on us the duty of increased attention to respect for law, obedience to authority, and regard for the rights of others as fundamental principles of our social order.

"See to it that the commonwealth receives no injury," is the order of the day to every American citizen and particularly to every American teacher. Our instruction should be so organized and so infused with the spirit of altruism that the ends of good citizenship may be increasingly realized in the products of the schools.

The President of the Association is hereby authorized and directed to enlarge the standing Committee for the Promotion of a National University; and the Board of Directors are hereby requested to make an adequate appropriation for the clerical and other expenses of this committee.

The Board of Directors are also requested to print for use in promoting the movement for a National University, in a separate edition, the four addresses on this subject submitted at the general sessions of this convention.

Respectfully submitted,

Committee on Resolutions

JAMES W. CRABTREE, of Wisconsin, *Chairman*,
WILLIAM MCK. VANCE, of Ohio
FLORENCE HOLBROOK, of Illinois
ROBERT J. FULLER, of Massachusetts
WILLIAM M. DAVIDSON, of District of Columbia
JOHN W. OLSEN, of Minnesota

Motion was made to adopt the report of the Committee on Resolutions. Motion seconded.

A member asked if "suffrage for women" meant the ballot for women; the President referred the question to Chairman Crabtree, who answered that it did. Another member asked that the resolutions be voted for one at a time.

PRESIDENT PEARSE: The suggestion has been made that we vote upon the resolutions one at a time. If it is so moved it will be done. If it is not, the motion to adopt the report of the Committee on Resolutions as a whole will be voted upon.

The motion to adopt the report of the Committee on Resolutions was unanimously carried.

MR. CRABTREE: The Committee has this additional resolution:

Resolved, That the National Education Association appropriate the sum of three thousand dollars, the same to be used, or as much thereof as may be necessary, for the further investigation of the Committee on Salaries, Tenure, and Pensions of Teachers.

Motion was made and seconded to adopt the resolution; which motion was unanimously carried.

MR. CRABTREE: I also offer the following resolution:

Resolved, That the thanks of the Association are hereby tendered to its honored President, Carroll G. Pearse, for the exceptionally valuable program presented at this meeting and for his efficient management of the affairs of the Association during the past year;

Be it further resolved, That the Association hereby expresses its appreciation of the arrangements made and so successfully carried out by the teachers and citizens of Chicago and Illinois for the reception and entertainment of the members of the Association.

A motion was made and seconded to adopt the resolution; which motion was carried unanimously.

J. A. SHAWAN, of Ohio: One year ago at the San Francisco meeting a resolution was introduced approving of the "Uniform Key Alphabet Report," as drawn up by a committee of which I was a member. That resolution was laid on the table for one year. I now move that it be taken from the table and passed by the Association.

The motion was seconded.

PRESIDENT PEARSE: The Chair will say that it is in order to take this matter up at this time. The Chair thinks it only fair to say, however, that this recommendation came to us from the Department of Superintendence with the request that this Associa-

tion indorse it. Since then the Department of Superintendence has reversed its action and withdrawn its former request. The Chair feels that this explanation is due to the members. It is now moved and seconded that this report on a key alphabet be taken from the table and passed by the Association.

The motion was lost.

PRESIDENT PEARSE: The next business is the consideration of the report of the Committee on Revision of the By-Laws; this report was presented at the annual business meeting in Boston, in 1910, and ordered to lie over for one year; it came up for action at the annual business meeting of active members at San Francisco last year, and was, at that time, laid upon the table for one year. It was expected, at Boston, that this report would be printed and sent out among the members so that all might have opportunity to read and study it. However, that was not done by the Executive Committee in time so that any very careful study was possible. It was sent out to members, I believe, about a month or six weeks before the time of the meeting in San Francisco. The members at the annual business meeting there ordered that it be laid on the table for one year. It now comes up as "unfinished business," a report of the Committee on Revision of the By-Laws.

THE SECRETARY: The report was printed and sent out to the members as ordered.

PRESIDENT PEARSE: The members who have just become active members, if I understand the case correctly, have not had an opportunity to receive until today a copy of the committee's report. (Cries of "No," "No.") Former members have received copies sent out by the Secretary. Many, if not all of the active members present, have the report in their hands.

The question now recurs on the report of the Committee on Revision of the By-Laws. What is the pleasure of this meeting? Shall we take up the articles one by one, article by article, and afterward take general action as to the adoption of the revised By-Laws as a whole?

A MEMBER: I understand that the report of this committee must be embodied as a part of the Constitution and By-Laws; and that such a report from a committee must lie upon the table for one year and be printed, as the Constitution provides.

PRESIDENT PEARSE: The Chair will rule: This report that is now before you for action was presented at the Boston meeting, two years ago; it was printed according to the requirements and sent out to all the active members last year; it was also sent to the active members this year. The Chair rules that this is a compliance with the requirements of the Articles of Incorporation and the By-Laws.

JOHN R. KIRK, of Missouri: I want to ask a question as to the extent of the ruling by the Chair. I understand from the Constitution that an amendment which has been offered and is left to lie over for one year may itself be amended, provided the amendment to the amendment does not materially change the substance of the original amendment, and that in some of these "Amendments by Members," which are printed on the white sheet, the substance of the original amendment is undoubtedly altered. I ask whether the Chair rules that all of these amendments in the right-hand column of the white sheet entitled "Amendments by Members" are in order or only those that do not change the substance of the original amendment?

Cries of "Out of order."

PRESIDENT PEARSE: The Chair will say that the gentleman is in order and has a perfect right to raise the question. Under ordinary conditions involving a proposition to make amendments, the amendments must be confined to the specific questions raised; but on the report of a "Committee on the Revision of By-Laws," which had before it all the subject-matter contained in the By-Laws, and has dealt with practically every question touched upon in the By-Laws, all matters contained in the By-Laws, and all matters treated in the report of that committee, come up for action and may be considered. In

connection with new matters which may be offered, the Chair will rule, as the occasion arises for such ruling, as to whether the particular matter offered is within the proper scope and may be considered by this meeting at this time.

D. W. SPRINGER, of Michigan: I move that Article I, as it was proposed at the Boston convention by the Committee on Revision of the By-Laws, be adopted as follows:

ARTICLE I—MEMBERSHIP

SECTION 1. Teachers, school and library officials, educational publishers, and all others actively engaged in educational work, may become active members of the National Education Association of the United States upon the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 2. The annual dues of active members are two dollars, which shall be paid at the time of the annual meeting of the Association, or shall be sent to the Secretary before September 1 of each year. An active member may discontinue his membership by giving written notice to the Secretary before September 1, and may restore the same only on payment of the enrollment fee of two dollars and the annual dues for the current year. An active member forfeits his membership by being two years in arrears, and may restore the same only on the payment of the amount of his arrears and the annual dues for the current year.

SEC. 3. All life members and life directors shall be denominated active members, and shall have all the rights and privileges of such members without the payment of the annual dues.

SEC. 4. The right to vote and to hold office in the Association, the Council, or the departments is restricted to active members of three months' standing whose dues are paid.

SEC. 5. Any person may become an associate member for one year by paying a membership fee of two dollars.

SEC. 6. Eminent educators not residing in America may be elected by the Board of Directors corresponding members. The number of corresponding members shall at no time exceed fifty. They shall not pay any dues.

SEC. 7. The names of active and corresponding members shall be printed in the volume of *Proceedings*, or the *Yearbook* of the Association, with their respective educational titles, offices, and addresses.

A MEMBER: I second the motion.

PRESIDENT PEARSE: It is moved and seconded that Article I as reported by the Committee on Revision of the By-Laws be adopted.

W. B. OWEN, of Chicago: I wish to offer substitutes for the amendments proposed by the committee. These substitutes have been printed along with the amendments proposed by the National Education Association committee and are in the hands of the active members now present. I wish to proceed in as fair a way as possible so as to bring them before the meeting. If the Chair will indulge me I will try to speak to the motion. I wish to say that if the meeting desires me now to take the time and trouble to read the proposed substitute in its entirety, which I offer for Article I, I will read it.

PRESIDENT PEARSE: The motion has been made to substitute. What is the pleasure of the meeting?

Cries of "Read it, read it."

PRESIDENT PEARSE: Read it.

MR. OWEN: May I say also in explanation that a good deal of the matter of the National Education Association committee report has been embodied in the amendments proposed by the Members' Committee, so that you will find much duplication. I am very glad to make this acknowledgment, as I certainly have no desire to take away from the committee any of the credit that is due them. They have furnished a great deal of very valuable material. In order to save time, however, it seems wise that the amendments proposed by members be offered in the form of a motion to substitute rather than as a motion to amend the report of the committee—

Cries of "Hurry up, hurry up."

PRESIDENT PEARSE: Read it.

MR. OWEN (reading):

ARTICLE I—MEMBERSHIP

SECTION 1. Teachers, others actively engaged in educational work, and educational institutions as defined in Section 2, may become active members of the National Education Association of the United States upon the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 2. Educational institutions shall include schools, school boards, library boards, educational publishers, and such clubs and similar organizations as are distinctly educational or have educational departments properly organized with a definite membership.

SEC. 3. Educational institutions as defined in Section 2 may be enrolled as active members and represented by any person regularly connected with, or a member of, the institution, and such representative may exercise all the rights and enjoy all the privileges of active membership, including the right to vote at business meetings; *provided*, That such representative presents a certificate showing that the person named therein has been regularly elected as such representative of the faculty or membership of such institution; but no person shall under any circumstances have the right to cast more than one vote.

SEC. 4. The annual dues of active members are two dollars which shall be paid at the time of the annual meeting of the Association, or shall be sent to the Secretary before November 1 of each year. An active member may discontinue his membership by giving written notice to the Secretary before November 1. An active member forfeits his membership by being two years in arrears. Those who have forfeited or discontinued their membership may exercise the option of renewing the same by paying all arrears and getting the published *Proceedings* of the intervening years, or of becoming members on the same terms as new members. Active members shall be entitled to the published *Proceedings* without coupon or other conditions.

SEC. 5. All life members and life directors shall be denominated active members, and shall have all the rights and privileges of such members without the payment of the annual dues.

SEC. 6. The right to vote and to hold office in the Association, the Council, or the departments is open to all active members of thirty days' standing whose dues are paid.

SEC. 7. Any person may become an associate member for one year by paying a membership fee of two dollars.

SEC. 8. Eminent educators not residing in America may be elected by the Board of Directors corresponding members. The number of corresponding members shall at no time exceed fifty. They shall not pay any dues.

SEC. 9. The names of active and corresponding members shall be printed in the published *Proceedings*, or the *Yearbook* of the Association, with their respective educational titles, offices, and addresses.

A MEMBER: Kindly read Section 6 again, as I think it differs from the way it is printed.

Whereupon Section 6 was again read by Mr. Owen.

MR. OWEN: I move the adoption of the substitute.

MR. SPRINGER: The substitute sections are the same as the National Education Association committee's report with the exception of Sections 2 and 3; Sections 2 and 3 relate to institutional membership, and that question comes before us by reason of the additional amendment which was proposed at San Francisco and which is printed at the end of the report; so that there is nothing in the substitute which was not before us at San Francisco.

MR. OWEN: May I explain, and I think it is due that an explanation be made. The addition of the words "of thirty days' standing" in Section 6, has been made because of recognition of the fact that the setting of a fixed time beyond which new active membership may not be secured, if one is going to vote, at the annual meeting, is the only fair method of regulating the voting privilege.

JACQUES W. REDWAY, of New York: My sympathy is with the spirit of that resolution but I am not in sympathy with the form in which it is put. I am not a corporation lawyer but I have been in corporation councils and in directorates of corporations long enough to know that that matter has been threshed out time and time again, and it has always been declared illegal.

This institution is no longer an independent institution. It is a federal corporation

and organized under federal laws, and any member, any active member whose dues are paid, can call for a review of the actions of this organization in the federal courts.

Now in regard to this thirty days' limit of voting privileges, it disfranchises a member or members and instead of thirty days you might just as well say forty years. I think that matter can be better brought about and in the more legal manner by making them—

Cries of "Out of order."

PRESIDENT PEARSE: The gentleman has the floor; but state your point of order.

A MEMBER: The gentleman is not talking on the point at issue.

MR. REDWAY: I don't think there is a corporation lawyer in the United States who would attempt to defend for one minute, before the federal Supreme Court, a proposition of this sort.

MR. OWEN: I will not undertake to say what a corporation lawyer might do, but if the gentleman will look on page 2 (the pages are numbered at the bottom), he will note that Section 5, in the left-hand column, headed "Charter Provisions," reads as follows:

That the membership of the said corporation shall consist of three classes of members—active, associate, corresponding—whose qualifications, terms of membership, rights, and obligations shall be prescribed by the By-Laws of the corporation. (See Section 5 of Act of Incorporation.)

And it seems to me that gives this body the right to make this qualification and prescription.

MR. REDWAY: I will take issue with the gentleman from the fact that this body has no right whatever to perform illegal acts.

PRESIDENT PEARSE: The Chair will state that in his opinion the amendment as now framed would render it impossible for anyone to vote at the meeting following the time when he paid his membership fee, as the membership now runs from July 1 to the following June 30; it would, therefore, be impossible for anyone to have been a member thirty days, at the time of the annual business meeting of the Association, and so to be entitled to the privilege of voting. If it is the desire of this body to require some particular signification of intention in the matter, the case could probably be reached by requiring that in order to vote, a new member shall have given notice, or made application for membership, not less than thirty days before the opening of the Association year—that is, not less than thirty days before July 1.

MR. OWEN: Perhaps it would be better, in order that the Association may pass upon the matter, to withdraw the words "of thirty days' standing."

A MEMBER: What is the whole question?

PRESIDENT PEARSE: The question now is, Shall we strike out the words "of thirty days' standing," from the substitute as read?

A MEMBER: And have it read as printed?

PRESIDENT PEARSE: Yes, I understand that is the motion before the house, to adopt the article as printed.

A MEMBER: The motion is to adopt the substitute as printed in the pamphlet?

PRESIDENT PEARSE: That is the motion.

A MEMBER: Do I understand the gentleman who presented it that he presents it literally as printed here?

MR. OWEN: Now there is one other change that I wish to call attention to, and that is in Section 4, line 6; the word "one" as printed is changed to "two," and makes it read "An active member forfeits his membership by being two years in arrears."

PRESIDENT PEARSE: That is, two years instead of one. Any further questions?

A MEMBER: Has this thirty days been stricken out?

PRESIDENT PEARSE: It is moved and seconded that the words "of thirty days' standing" be stricken out. All in favor of that signify the same by saying Aye, contrary No. Motion carried.

A MEMBER: I am an active member and I come to the convention next year, and I don't pay my dues; am I still a member, and can I vote?

PRESIDENT PEARSE: You don't quite understand. You remain a member for one year longer; but in order to get your certificate of membership you have to pay your dues; when you get your certificate of membership, and not until then, you can get into the business meeting, and vote. You are not, however, cast off into the outer darkness. Even tho you do not pay your dues for the year, and so are unable to vote, you are still carried as a member.

The motion to adopt the members' substitute for Article I, as amended, was put and carried.

MR. SPRINGER: I move the adoption of Article II as proposed by the Committee on Amendments to the By-Laws as follows:

ARTICLE II—ELECTION OF OFFICERS

SECTION 1. The President, Vice-Presidents, Treasurer, and Directors of the National Education Association of the United States shall be chosen by the active members of the Association, by ballot, at their annual business meeting, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual meeting subsequent to their election, and until their successors are chosen, except as herein provided. The Secretary and the Treasurer shall enter upon their duties at a date which shall be determined by the Board of Trustees and which shall not be later than the first of August, and shall continue in office during the terms for which they are separately chosen and until their successors are duly elected. No President of the Association shall succeed himself in office.

PRESIDENT PEARSE: Do I hear a second?

A MEMBER: I second the motion.

PRESIDENT PEARSE: It is moved and seconded that Article II be adopted as printed.

MR. OWEN: I should like to offer and read the substitute.

PRESIDENT PEARSE: All right.

MR. OWEN (reading substitute):

ARTICLE II—ELECTION OF OFFICERS

SECTION 1. The President, Vice-Presidents, Treasurer, and Directors of the National Education Association of the United States shall be chosen by the active members of the Association, by ballot, at their annual business meeting, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual meeting subsequent to their election and until their successors are chosen, except as herein provided. The Secretary and the Treasurer shall enter upon their duties at a date which shall be determined by the Executive Committee and which shall not be later than the first of October [changed from August] and shall continue in office during the terms for which they are separately chosen and until their successors are duly elected.

I move that the substitute be adopted.

Seconded.

MR. SPRINGER: I should like to know the reason for putting in the Executive Committee instead of the Board of Trustees in Section 1.

MR. OWEN: In making these By-Laws the plan was adopted to give power to the Executive Committee all thru where not in conflict with charter provisions, so that action could be obtained promptly. The Executive Committee, as a body, is elected anew every year by the Association and would be under the immediate direction and influence of the Association, so far as possible.

MR. SPRINGER: The Treasurer is a member of the Executive Committee and thus would be sitting upon his own acts.

MR. OWEN: I recognize the truth of the statement; I think the difficulty could be avoided if the words "Board of Trustees" were substituted for the words "Executive

Committee." I therefore accept the suggestion to substitute the words "Board of Trustees" for the words "Executive Committee."

PRESIDENT PEARSE: The Chair hears no objection; the substitution is made. Moved and seconded that the said Section I be adopted as amended. All in favor of the motion signify by saying Aye, contrary No. Motion carried. What is the further action?

MR. OWEN: I will read Section 2 (reading):

At the annual business meeting of active members, the Association may nominate by ballot and recommend to the Board of Directors one name for member of the Board of Trustees, one name for member of the Executive Committee, and in like manner may nominate and recommend to the Board of Trustees one name for permanent Secretary.

The names of members thus nominated and recommended for the Board of Trustees and Executive Committee respectively shall be certified at once to the Board of Directors by the President and Secretary of the Association, and the name of the member so nominated and recommended for the office of permanent Secretary shall be certified in the same manner to the Board of Trustees.

I move the adoption of the substitute.

A MEMBER: I second the motion.

PRESIDENT PEARSE: It has been regularly moved and seconded that the substitute be adopted. Are you ready for the question?

A MEMBER: I desire to call the attention of the meeting to one word, to the word "permanent." There is no such a thing as a permanent Secretary. I suggest that the word "permanent" be stricken out.

PRESIDENT PEARSE: Is it understood that the suggestion is accepted and the word "permanent" stricken out?

A MEMBER: I think the word "permanent" should be taken out; the Board of Trustees elect a Secretary once in four years; we should not have to go thru the trouble of nominating a Secretary every year.

PRESIDENT PEARSE: As I understand the matter it is the wish of this body that the word "permanent" be stricken out, without further discussion, and I will put it as a motion. Motion carried.

MR. SPRINGER: I should like to call attention to the fact that this term of secretaryship is not necessarily a term of four years. The Board of Trustees may elect for one year.

PRESIDENT PEARSE: For a term not exceeding four years.

MR. SPRINGER: I move that Section 2 be laid on the table for future discussion, as I don't think that under the By-Laws it can be adopted at the present time, and I move that it be laid on the table for final action one year hence.

PRESIDENT PEARSE: The Chair is not sure as to the proper ruling on this; the report of the Committee on By-Laws raises the whole matter as to the By-Laws; but the Chair is not sure as to just the ruling to apply in this case. However, in order not to strain a point, I shall rule that this particular section should be permitted to lie over for one year, and I will let the matter stand in that way for the present, at least.

A MEMBER: The section has been ruled out of order?

MISS HALEY: This matter is proper as a part of "election of officers."

PRESIDENT PEARSE: The point has been made that the matter comes properly under the head of election of officers. This presents a new phase of the matter; the section has reference to the election of officers or to the nomination of them; the nomination is part of the election; the Chair is inclined to rule that this may be considered this year, but the motion is that the section be laid on the table until next year.

MR. SPRINGER: I shall appeal from the decision of the Chair, as I believe the matter cannot be acted on at this time.

PRESIDENT PEARSE: The gentleman appeals from the decision of the Chair and the question now is whether the decision of the Chair shall stand.

E. E. SCRIBNER, of Michigan: State your decision once more.

PRESIDENT PEARSE: The decision is as to the particular question raised by Section 2: "At the annual business meeting of active members the Association may nominate by ballot and recommend to the Board of Directors," etc. The Chair rules that this may be considered since it relates to the election of officers.

A MEMBER: The Chair has changed his ruling?

PRESIDENT PEARSE: This is a change of my ruling.

MISS HALEY: If we cannot consider that portion of the section which has been declared to be new matter, then we may not consider at any time any portion of new matter which was not contained in the report of the Committee on Revision of the By-Laws.

PRESIDENT PEARSE: The Chair has ruled that the section may be considered and there has been an appeal from the decision of the Chair. If it is desired to argue the question, the Chair is ready to listen.

There being no argument, the vote was taken and the decision of the Chair sustained.

A MEMBER: What is the question?

PRESIDENT PEARSE: The question is as to Section 2; a motion has been made for the adoption of the substitute for Section 2, offered by Mr. Owen.

A. S. HALL, of Chicago: I move that Section 2 of Article II be referred to a committee to be reported on at the next annual business meeting of active members.

PRESIDENT PEARSE: Is there a second?

A MEMBER: I second the motion.

PRESIDENT PEARSE: It has been regularly moved and seconded that Section 2 of Article II be referred to a committee for report at the next annual business meeting.

A MEMBER: I wish to make an amendment to the motion that the whole of the section be referred to a committee of five to report at the next meeting.

Amendment seconded.

PRESIDENT PEARSE: It has been regularly moved and seconded that the whole matter be referred to a committee of five to report at the next meeting.

DOMINIC SCHULER, of Wisconsin: It seems to me, Mr. Chairman, that the substitute offered by the worthy gentleman ought to be changed, and inasmuch as it may be necessary for us to give this much thought and consideration, this whole matter should go to a special committee of five, to report at the next meeting.

MR. SCRIBNER: I have listened to the remarks of the worthy gentlemen and it seems to me that we ought not to amend the Constitution and By-Laws hastily. You stated, Mr. Chairman, that a copy of the proposed amendments was sent to every member —every active member of this Association, about a month ago. I must confess that it never came to my attention. I have tried to read the amendments here at this meeting this afternoon. I feel that we have a right to know something about this, we have that right, it seems to me, as members of the greatest educational body in the world, and should give our best thought and attention to changes which may affect vitally the future of the Association. I see no reason why we should hastily adopt changes in the Constitution and By-Laws. Why not deliberate? Why not have these proposed changes printed and sent as soon as possible to every active member for further consideration and have the matter lie over for one year? It does seem to me that in relation to matters of this kind, affecting us so vitally, we should not be required to sit thru all this hot afternoon and consider each article and each section separately. Let us have deliberation. And let us have the proper time in which to do it. I believe that most of these propositions are good. I am inclined to favor all of them but I appeal to this body for deliberation and time in which to give them the consideration which they deserve.

PRESIDENT PEARSE: There has never been a time when the Association did not find itself similarly situated. Whenever it attempted to do business it never had time

enough to do it. We never had time to attend to and dispose of the business of the Association. There were always other matters pressing for attention.

The Chair has been informed that the report of the Committee on Revision of the By-Laws was sent out to the active members last May or June by the Secretary. Now we hear that members did not receive the report. We are interested in the business of this Association and we do not wish to make any changes without due notice or without giving them our best attention. I will ask the Secretary to state whether the committee's report was sent out to the active members.

The Secretary stated that the report was sent out.

A MEMBER: The trouble is that we did not get them in time to give them our consideration.

A MEMBER: It does not seem to me that the members of the committee themselves know exactly what they want in the way of changes and I am in favor of letting this matter go over for one year.

PRESIDENT PEARSE: A lady has been standing; I will recognize her: Miss Howe, of California.

AGNES E. HOWE, of California: I wish to say, Mr. Chairman, that I, as a member of this organization, am greatly interested in it and wish further to say that we have been waiting two years now to have these By-Laws amended, and if they are going to be amended, now is just as good a time to make the amendments as we can find.

MR. OWEN: I wish to say, as the maker of the motion to substitute, that nothing has been presented here today that has not been considered a great many times and been given careful attention.

MR. SPRINGER: I think that the left-hand column here is identical in wording with the blue slip on which the Secretary sent out the amendments proposed by the committee.

MR. OWEN: The blue slip contains the changes proposed by the National Education Association committee.

A. MEMBER: A point of order, Mr. Chairman. By the statement of the Secretary, the only report which a committee has made is contained on this blue slip which I have in my hand; and the makers of the motions to substitute, I observe, are constantly using another.

PRESIDENT PEARSE: I will state that this report was made at the Boston meeting and laid over until the San Francisco meeting; the committee at that time considered itself discharged from further consideration of the matter. We come now to the second year; the chairman of the committee is not present to report. Members of the Association who were not members of the original committee have considered the matter and thought they wished to offer some amendments or substitutions. They prepared these substitutes; they have had them printed; they are presenting them at this time.

A MEMBER: Now can't we listen to a report of the committee?

PRESIDENT PEARSE: The committee's report is before us.

MR. SPRINGER: I moved the adoption of the Article as presented by the committee. Then Mr. Owen moved the substitution of the article as it is proposed by members; you could not make a motion first to adopt that which was proposed by the members because it was not presented to us one year ago. At three points in the reading, as it proceeds, I desire to ask a question of the Chair, as a matter of record, as to whether he rules that matter presented in the recommendations of members is germane. To my mind it is not; and I do not wish the record to be such that we can be subject to criticism in the action we may take on the By-Laws that we now have before us.

Aside from those points upon which a question might be raised, I am going to stop, after moving the adoption of the report of the Committee on Revision of the By-Laws.

MISS BLAKE: I want to suggest that we are not proceeding very rapidly. I would urge the Chair that we continue as rapidly as possible, as I am getting terribly hungry.

The By-Laws are apparently not so important since the election and if we want to make the changes I would like to move an adjournment now and meet again in three-quarters of an hour, at which time we can go on and finish.

A MEMBER: I would just like to say one word at this time. Let us not forget that the purpose of that article of the By-Laws is to require that the amendments to the Constitution and By-Laws shall be submitted one year in advance and printed; that is, to protect this body against By-Laws which have not been thoroly digested by the active membership.

A MEMBER: I rise to a point of order.

FIRST MEMBER: The Chair has already said the matter of this article is germane.

A MEMBER: What is the motion? We are losing sight of the real motion.

PRESIDENT PEARSE: The point of order is well taken.

A MEMBER: What is the question, Mr. Chairman?

PRESIDENT PEARSE: The motion is that Section 2 of Article II be referred to a committee of five and laid over for one year; that matter is now before us.

MR. SCRIBNER: Question!

L. E. WOLFE, of Tennessee: Mr. Chairman, the main question here is, to my mind, a very important one. The main purpose of this Section 2 is to place more power in the Executive Committee and less in the Board of Directors. What does it mean? Simply that the representative body, the directors, coming up from every state in this Union—that their power shall be taken away and given to an Executive Committee—

A MEMBER: I rise to a point of order.

PRESIDENT PEARSE: What is your point of order?

A MEMBER: My point of order is that the matter that was presented by the mover of the motion no longer contains reference to the Executive Committee and the motion was to lay the matter over and refer it to a committee.

PRESIDENT PEARSE: Mr. Wolfe.

MR. WOLFE: Mr. Chairman, what is the purpose of this? Here we have amendments proposed by the members. What members? Are these amendments different in this column than in this (indicating)? We ought to be given time to think about it and then meet again—given time for consideration. There is no question about it; it was stated by Mr. Owen that this whole thing is to give the Executive Committee more power.

Cries of "Out of order, out of order."

MR. OWEN: Mr. Chairman.

PRESIDENT PEARSE: The gentleman has the floor, Mr. Owen.

MR. OWEN: The gentleman is out of order in his discussion of Section 2, Article II, as the question is whether it shall be referred to a committee or not.

PRESIDENT PEARSE: The point is well taken.

MR. WOLFE: As a point of special privilege, Mr. Chairman?

PRESIDENT PEARSE: As a question of special privilege, Mr. Wolfe.

MR. WOLFE: I believe I have a right to discuss the question before us and I am willing to stay here as long as anyone, as I feel that we are here for a purpose and I want to see things done right.

Cries of "Out of order, out of order."

PRESIDENT PEARSE: Will the gentleman please confine himself to the points at issue? The question is whether the matter shall be referred to a committee.

MR. SCHULER: I wish to take up the question of the motion before the house and wish to say that I believe we should refer this whole subject, together with the committee's reports that are before us, to a special committee of five to report at the next meeting. That is the question before us; that is the whole question. I was surprised a moment ago to note that members were not talking to the question—were not discussing that

particular question. Now some ladies and gentlemen seem to think that we ought to get right at it and I say let us look at it—

MISS HALEY: I rise to a point of order.

PRESIDENT PEARSE: What is your point?

MISS HALEY: My point of order is that the question before the house is whether this Article II, Section 2, shall be referred to a committee to report at the next meeting.

A MEMBER: The question is whether the whole subject shall be referred to a committee.

Cries of "Question! Question!"

MR. SCHULER: I wish to say upon this question, following the eloquent lady who spoke a minute ago, that I believe that the whole subject as stated on the blue and the white paper should be referred to a committee for future action.

PRESIDENT PEARSE: We will now vote upon that question.

MR. SCHULER: I simply want to say a word on this, under the question of special privilege—I want to draw your attention to the importance of this question.

A MEMBER: I ask for a point of order. My point is that the gentleman is not speaking upon this question and I move that the discussion on this question be now closed.

A MEMBER: Second the motion.

PRESIDENT PEARSE: Moved and seconded that this question be referred to a committee and the discussion closed.

MR. SCHULER: I will state that I had the floor at the time the point of order was raised.

A MEMBER: I had the right to make the motion. This gentleman is out of order.

MR. SCHULER: I rise to a question of privilege.

A MEMBER: This gentleman is out of order and is not entitled to the floor. How many times will a gentleman be out of order before he has to sit down? A question of information?

PRESIDENT PEARSE: The Chair will say in reply that if a gentleman is called to order and thereupon brings himself to order, he becomes "in order" and the Chair rules that he has not forfeited his right to the floor.

MR. SCHULER: Mr. Chairman, ladies and gentlemen, I simply would like to say here that I think we ought to act on this motion here, as we are not progressing, and I want to say that we are most heartily in sympathy with it. I am heartily with this report, the committee's report on the By-Laws in question, except in one particular; I don't believe that it is germane—

Cries of "Question! Question!"

MR. SCHULER: I move that we refer this matter to a committee of five.

Motion seconded.

PRESIDENT PEARSE: All in favor of the motion signify by saying Aye, contrary minded, No. The "noes" have it. Now let us have a rising vote. It is moved and seconded that Article II, Section 2, be referred to a committee for report at the next meeting. Motion carried.

MR. SPRINGER: I move the adoption of Article III of the Committee's report as follows:

ARTICLE III—DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Association, and shall perform the duties usually devolving upon a presiding officer. In his absence, the ranking Vice-President who is present shall preside; and in the absence of all Vice-Presidents a chairman *pro tempore* shall be elected. The President shall prepare the program for the general sessions of the annual meeting of the Association, and with the advice of the Executive Committee shall determine the time and place of the general meeting of the Association and of the various departments not definitely fixed by these By-Laws

and shall have the power to require such changes to be made in the programs of the Council and the departments as will promote the interest of the annual meeting. The President shall be member *ex officio* of the Board of Trustees and chairman of the Board of Directors and of the Executive Committee. He shall sign all bills approved by the Board of Directors for payment. On the expiration of his term of office as President, he shall be elected First Vice-President for the ensuing year.

SEC. 2. The Secretary shall keep a full and accurate record of the proceedings of the general meetings of the Association and all meetings of the Board of Directors, shall conduct the business of the Association under the direction of the Board of Directors and the President, shall collect all moneys due the Association and pay the same to the Treasurer, shall countersign all bills approved by the Board of Directors for payment, shall advance the interests of the Association in every way in his power, and shall have his records present at all regular meetings of the active members of the Association, and of the Board of Directors. He shall keep a list of members as required by Section 7 of Article I of these By-Laws and shall revise said list annually. He shall be chairman of the Committee on Publication and secretary of the Board of Directors. He shall be the custodian of all the property of the Association not in charge of the Treasurer and the Board of Trustees. He shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association.

SEC. 3. The Treasurer shall receive from the Secretary, and under the direction of the Board of Trustees shall hold in safekeeping, all moneys paid to the Association; shall pay the same only upon the order of said board; shall notify the chairman of the Board of Trustees whenever the surplus funds in his possession exceed five hundred dollars; shall keep an exact account of his receipts and expenditures, with vouchers for the latter; and said accounts, ending on the first day of July of each year, he shall render to the Board of Trustees, and, when approved by said board, he shall report the same to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting and to the active members at their annual business meeting. The Treasurer shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession, belonging to the Association.

SEC. 4. The Board of Directors shall elect corresponding members as prescribed by Section 6 of Article I of these By-Laws, shall elect members of the National Council of Education as provided in Section 3 of Article IV of these By-Laws, shall have power to fill all vacancies in the body of officers of the Association except the Secretary, shall make all necessary arrangements for the meetings of the Association, the Council, and the departments, shall approve all bills for the payment of moneys by the Association, shall make appropriations for the investigation of educational questions when deemed advisable by the Board of Directors and approved by the Board of Trustees, shall make a full report of the financial condition of the Association (including the reports of the Treasurer and the Board of Trustees) to the active members at their annual business meeting, and shall do all in its power to make the Association a useful and honorable institution.

SEC. 5. The Executive Committee shall assist the presiding officer in arranging for the time and place of the annual meeting of the Association, of the National Council of Education, and of the various departments.

SEC. 6. The Board of Trustees shall require of the Secretary and the Treasurer each a bond of such amount as may be determined by said board, for the faithful performance of his duties, shall make a full report of the finances of the Association to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting of the Association, and shall annually determine the date at which the term of office of the Treasurer shall expire, which date shall not be latter than the first of August. It shall choose its own chairman and secretary.

Seconded.

PRESIDENT PEARSE: Moved and seconded that the committee's report on Article III be adopted.

MR. OWEN: I move to substitute for Article III, as follows (reading):

ARTICLE III—DUTIES OF OFFICERS

SECTION 1. The President shall preside at all meetings of the Association and shall perform the duties usually devolving upon the chief executive officer of such an Association. In his absence the ranking Vice-President who is present shall preside; and in

the absence of all Vice-Presidents, a chairman *pro tempore* shall be elected. The President shall prepare the program for the general sessions of the annual meeting of the Association, and, with the approval of the Executive Committee, shall determine the time and place of the general meeting of the Association and of the various departments not definitely fixed by these By-Laws, and shall have the power to require such changes to be made in the programs of the Council and the departments as will promote the interest of the annual meeting. The President shall be a member *ex officio* of the Board of Trustees and chairman of the Board of Directors and of the Executive Committee. He shall sign all bills approved for payment by the Board of Directors, and all bills approved or authorized by the Executive Committee between the meetings of the Board of Directors. On the expiration of his term of office as President, he shall become First Vice-President, for the ensuing year, and shall be chairman *ex officio* of the Committee on Publication.

A MEMBER: I second the motion.

PRESIDENT PEARSE: Regularly moved and seconded that the substitute as read for Section 1, Article III, be adopted. All in favor of the motion signify by saying Aye, all contrary, No.

Motion carried.

MR. OWEN: I move the adoption of Section 2 of Article III as printed, with the exception of the words "June 20," in that section having it changed to "July 1," making that sentence read as follows: "He shall submit his annual report to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted to the Board of Directors at its annual meeting."

ARTICLE III

SEC. 2. The Secretary shall keep a full and accurate record of the proceedings of the general meetings of the Association and all meetings of the Board of Directors and of the Executive Committee, shall conduct the business of the Association as provided in the Articles of Incorporation and the By-Laws, and in all matters not definitely prescribed therein, shall be under the direction of the Executive Committee, and in the absence of direction by the Executive Committee shall be under the direction of the President, and shall receive or collect all moneys due the Association and pay the same each month to the Treasurer, shall countersign all bills approved for payment by the Board of Directors or by the Executive Committee in the interval between the meetings of the Board of Directors or on the approval of the President acting under authority of the Board of Directors, or Executive Committee. The Secretary shall have his records present at all meetings of the active members of the Association, of the Board of Directors, and of the Executive Committee. He shall keep a list of members as required by Section 9 of Article I of these By-Laws and shall revise said list annually. He shall be secretary of the Board of Directors, and a member of the Committee on Publication. He shall be the custodian of all the property of the Association not in charge of the Treasurer and the Board of Trustees. He shall give such bond for the faithful performance of his duties as may be required by the Executive Committee. He shall submit his annual report to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted to the Board of Directors at its annual meeting. At the expiration of his term of office he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association. The Secretary shall not print, publish, or distribute any official report or other document without the approval of the publication committee.

PRESIDENT PEARSE: Regularly moved and seconded that the section as read be adopted.

Motion carried.

MR. OWEN: I move that Section 3 of Article III be adopted with the exception that the words "Executive Committee" in line 2 be changed to "Board of Trustees."

ARTICLE III

SEC. 3. The Treasurer shall receive from the Secretary and under the direction of the Executive Committee shall hold in safekeeping all moneys paid to the Association; shall pay the same only upon the order of the Board of Trustees; shall notify the President of the Association and the chairman of the Board of Trustees whenever the surplus funds in his possession exceed five hundred dollars; shall keep an exact account of his receipts and

expenditures, with vouchers for the latter; and said accounts, ending on the fifteenth day of June of each year, he shall render to the Executive Committee not later than June 20, and, when approved by said committee, they shall be transmitted by the committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting and to the active members at their annual business meeting. The Treasurer shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession belonging to the Association.

PRESIDENT PEARSE: Is there any objection to this change? If there is not the change will be made; unanimously agreed to. Moved and seconded that the section as amended be adopted. All in favor of the motion signify by saying Aye, contrary, No. Motion carried.

MR. SPRINGER: In Section 2 of Article III where it has reference to the Secretary giving a bond, it prescribes that he shall give his bond to the Executive Committee. All other bonds go to the Board of Trustees. By the Articles of Incorporation, the Board of Trustees is the regularly recognized custodian of such papers and I think that change should be made the same as in any other case.

PRESIDENT PEARSE: I don't understand the latter part of it.

MR. SPRINGER: The papers relating to property and things of that sort. By the Articles of Incorporation the Trustees are recognized as the custodians of such papers. This relates to the property bond and implies that the Secretary should give his bond to the Board of Trustees the same as the Treasurer does.

MR. OWEN: I accept the amendment.

PRESIDENT PEARSE: The change will then be that where bonds are required the bonds should be acceptable to the Board of Trustees instead of the Executive Committee. If there is no objection the change will be made; it is so ordered.

MR. OWEN: There is a change also made in Section 3 of Article III in reference to accounts and expenditures, in the third line from the top of the page, from "the fifteenth day of June" to "the thirtieth day of June"; also in the next line, from "June 20" change to "July 1"; I will read the section as changed (reading):

SEC. 3. The Treasurer shall receive from the Secretary and under the direction of the Board of Trustees shall hold in safekeeping all moneys paid to the Association; shall pay the same only upon the order of the Board of Trustees; shall notify the President of the Association and the chairman of the Board of Trustees, whenever the surplus funds in his possession exceed five hundred dollars; shall keep an exact account of his receipts and expenditures with vouchers for the latter; and said accounts, ending on the thirtieth day of June of each year, he shall render to the Executive Committee not later than July 1, and when approved by the said committee, they shall be transmitted by the committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting and to the active members at their annual business meeting. The Treasurer shall give such bond for the faithful performance of his duties as may be required by the Board of Trustees. At the expiration of his term of office, he shall transfer to his successor all moneys, books, and other property in his possession, belonging to the Association.

PRESIDENT PEARSE: You have heard the section read and the motion that it be adopted as read with the changes made.

Motion carried.

MR. OWEN: I will read the substitute for Section 4 and move its adoption.

ARTICLE III

SEC. 4. The Board of Directors shall elect corresponding members as prescribed by Section 8 of Article I of these By-Laws, shall elect members of the National Council of Education as provided in Section 3 of Article IV of these By-Laws, shall have power to fill all vacancies in its own body and in the Board of Trustees; shall recommend to the Executive Committee the place for holding the annual meeting of the Association, the Council of Education, and the departments. The Board of Directors shall approve all bills incurred under authority of the Board of Directors, the Executive Committee, or

the President and Secretary acting under the authority of the Board of Directors or Executive Committee, shall appropriate from the current funds of the year the amounts of money ordered by the active members at their annual business meeting for the work of all special committees of investigation and research authorized and provided for by such active members at their annual business meeting, shall make a full report of the financial condition of the Association (including the reports of the Secretary, the Treasurer, and the Board of Trustees) to the active members at their annual business meeting, and shall do all in its power to make the Association a useful and honorable institution.

A MEMBER: Second the motion to adopt the section as read.

PRESIDENT PEARSE: Moved and seconded that the section be adopted as read.

Motion carried.

A MEMBER: I move the substitute for the remainder of Article III be adopted.

MR. OWEN: I second the motion and will read Sections 5 and 6 (reading):

SEC. 5. The Executive Committee shall assist the presiding officer in arranging for the time and place of the annual meeting of the Association, of the National Council of Education, and of the various departments.

The Executive Committee shall recommend to the active members at their annual business meeting the appointment of special committees for investigation or research, the subjects for which may have been suggested by the National Council, or by the active membership of the National Education Association, or by any of its departments; it shall recommend the amount of money to be appropriated for such investigations. When such special committees are provided for and duly authorized by the active members at their annual business meeting, the Executive Committee shall have general supervision of them; shall receive and consider all reports made by them and shall print such reports, and present the same, together with the reports received from the Secretary, the Treasurer, and the Board of Trustees and the recommendations of the Executive Committee thereon, to the active members at their annual business meeting. All such special committees shall be appointed by the President of the National Education Association.

The Executive Committee shall fill all vacancies occurring in the body of officers of the Association except vacancies in the Board of Directors, Board of Trustees, and the office of Secretary.

SEC. 6. The Board of Trustees shall require of the Secretary and Treasurer bonds of such amount as may be determined by said board for the faithful performance of their duties; shall make a full report of the finances of the Association to the Executive Committee not later than July 1 prior to the annual meeting of the Association, which report shall be transmitted by the Executive Committee to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting of the Association. It shall choose annually its own chairman and secretary.

PRESIDENT PEARSE: It is regularly moved and seconded that the sections as read be adopted.

Motion carried.

MR. SPRINGER: I move the adoption of the next article, Article IV, of the report of the Committee on Revision of the By-Laws, as follows:

ARTICLE IV—THE NATIONAL COUNCIL OF EDUCATION

SECTION 1. The National Council of Education shall discuss educational questions of public and professional interest; propose to the Board of Directors, from time to time, suitable subjects for investigations and research, and recommend the appointment of special committees of investigation and research, and the amount of appropriation that should be made for such purpose. When such special committees are provided for and authorized by the Board of Directors of the Association, the Council shall appoint them from the active membership of the Association, and have general supervision of them; receive and consider all reports made by them and report to the Board of Directors the result of its deliberations, with recommendations as to the disposition of said reports; have a report made at its annual meeting on "Educational Progress during the Past Year"; and in other ways use its best efforts to further the objects of the Association and to promote the cause of education in general.

SEC. 2. The National Council of Education shall consist of 120 regular members, selected from the active membership of the National Education Association. Any active member of the Association having the right to vote in the Association is eligible to membership in the Council, and, after the year 1909, each member shall be elected for six years and until his successor is elected.

SEC. 3. The annual election of members of the Council shall be held at the time of the annual meeting of the Association. The Board of Directors shall annually elect ten members and the Council ten members, and each body shall fill all vacancies in its quota of members. No state, territory, or district in the United States shall have at one time more than eight regular members in the Council.

SEC. 4. The annual meeting of the Council shall be held during the week of the annual meeting of the Association.

SEC. 5. The absence of a regular member from two successive annual meetings of the Council shall be considered equivalent to his resignation of membership. Persons whose regular membership in the Council has expired shall be denominated honorary members of the Council during the time of their active membership in the Association, with the privilege of attending the regular sessions of the Council and participating in its discussions. A member who discontinues or forfeits his active membership in the Association forfeits his membership in the Council.

SEC. 6. The officers of the Council shall consist of a president, a vice-president, a secretary, and such standing committees as may be prescribed by its by-laws, all of whom shall be regular members of the Council. The secretary of the Council shall, in addition to performing the duties pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the Council for publication. No president of the Council shall succeed himself in office.

SEC. 7. The National Council of Education is hereby authorized to adopt by-laws for its government not inconsistent with the Act of Incorporation or the By-Laws of the Association; *provided*, That such by-laws be submitted to and approved by the Board of Directors of the Association before they shall become operative.

SEC. 8. The Council may be changed or abolished upon a three-fourths vote of the Board of Directors of the Association taken at a regular meeting of the board upon the recommendation of a majority of the regular members of the Council; *provided*, That due announcement has been made of the proposed action.

MR. OWEN: I move that Article IV, as suggested by members, be substituted for Article IV as reported by the Committee of the National Education Association.

Motion seconded.

PRESIDENT PEARSE: You have heard the motion.

MR. OWEN: I will read Article IV.

ARTICLE IV—THE NATIONAL COUNCIL OF EDUCATION

SECTION 1. The National Council of Education shall discuss educational questions of public and professional interest; propose to the Executive Committee, from time to time, suitable subjects for investigation and research; have a report made at its annual meeting on "Educational Progress during the Past Year"; and in other ways use its best efforts to further the objects of the Association and to promote the cause of education in general.

SEC. 2. The National Council of Education shall consist of 120 regular members, selected from the active membership of the National Education Association. Any active member of the Association is eligible to membership in the Council, and each member shall be elected for six years and until his successor is elected.

SEC. 3. The annual election of members of the Council shall be held at the time of the annual meeting of the Association. The Board of Directors of the Association shall annually elect ten members and the Council ten members, and each body shall fill all vacancies in its quota of members. No state, territory, or district in the United States shall have at one time more than seven regular members in the Council.

SEC. 4. All meetings of the Council shall be held in connection with the annual meeting of the Association.

SEC. 5. The absence of a regular member from two successive annual meetings of the Council shall be considered equivalent to his resignation of membership. Persons whose regular membership in the Council has expired shall be denominated honorary members of the Council during the time of their active membership in the Association, with the privilege of attending the regular sessions of the Council and participating in its discussions. A member who discontinues or forfeits his active membership in the Association forfeits his membership in the Council.

SEC. 6. The officers of the Council shall consist of a president, a vice-president, a secretary, and such standing committees as may be prescribed by its by-laws, all of whom shall be regular members of the Council. The secretary of the Council shall, in addition to performing the duties pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the Council for publication.

SEC. 7. The National Council of Education is hereby authorized to adopt by-laws for its government not inconsistent with the Act of Incorporation or the By-Laws of the Association; *provided*, That such by-laws be submitted to and approved by the Board of Directors of the Association before they shall become operative.

SEC. 8. The powers and duties of the Council may be changed or the Council abolished upon a two-thirds vote of the Association taken at the annual business meeting of the Association; *provided*, That notice of the proposed action has been given at the preceding annual business meeting of the Association.

MR. ALEY: It seems to me that Section 4 of Article IV, which requires that all meetings of the Council shall be held in connection with the annual meeting of the Association, is entirely new matter and should be referred to a committee for action in one year. I make a motion to that effect.

A MEMBER: I second the motion.

PRESIDENT PEARSE: The Chair has heard the motion and the second that Section 4, relative to the holding of all meetings of the Council at the time of the annual meeting of the Association, be referred to a committee to report in one year. All those in favor of the motion say Aye, contrary, No. Motion carried.

A MEMBER: I move the adoption of Article IV, as read, with the exception of Section 4.

A MEMBER: I second the motion.

PRESIDENT PEARSE: It has been regularly moved and seconded that the substitute for Article IV be adopted as read, with the exception of Section 4, which has been referred to a committee. All those in favor of the adoption of the substitute will say Aye, contrary, No. Motion carried.

MR. SPRINGER: I move that Article V be adopted as presented by the committee as follows:

ARTICLE V—DEPARTMENTS

SECTION 1. The following departments are now (1910) in existence, to wit: The departments, first, of Superintendence; second of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training, Art, and Technical Education; sixth, of Kindergarten Education; seventh, of Music Education; eighth, of Secondary Education; ninth, of Business Education; tenth, of Child Study; eleventh, of Physical Education; twelfth, of Natural Science Instruction; thirteenth, of School Administration; fourteenth, the Library Department; fifteenth, of Special Education; sixteenth, of School Patrons; seventeenth, of Rural and Agricultural Education.

SEC. 2. The active members of the Association having the right to vote in the Association, and no others, are members of each department of the Association.

SEC. 3. Each department shall hold its annual meeting at the time and place of the annual meeting of the Association, except the Department of Superintendence and the Department of Normal Schools, which may hold their annual meeting in February of each year or at such other time as may be determined by said departments, subject to the approval of the Board of Directors of the Association.

SEC. 4. The object of the annual meetings of the departments shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be prepared by the respective presidents in conference with, and under the general direction of, the President of the Association. Each department shall be limited to two sessions, with formal programs, at the time of the annual convention, unless otherwise ordered by the President of the Association, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 5. The officers of each department shall consist of a president, a vice-president, and a secretary, who shall be elected at the last formal session of the department to serve one year and until their successors are duly elected, and who shall, at the time of their election, be active members of the Association, having the right to vote in the Association. No president of a department shall succeed himself in office.

SEC. 6. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the meeting of the department for publication.

SEC. 7. All departments shall have equal rights and privileges, with the exception stated in Section 3 of this article. They shall be named in Section 1 of this article in the

order of their establishment and shall be dropped from the list when discontinued. Each department may be governed by its own regulations in so far as they are not inconsistent with the Act of Incorporation, or these By-Laws.

SEC. 8. A new department may be established by a two-thirds vote of the Board of Directors of the Association taken at a regular meeting of the board; *provided*, That a written application for said department, with title and purpose of the same, shall have been made at the regular meeting of the board next preceding the one at which action is taken, by at least twenty-five active members engaged in the field of labor in the interest of which the department is purposed to be established. A department already established may be discontinued by the Board of Directors upon a two-thirds vote taken at a regular meeting; *provided*, That announcement has been made of the proposed action at a regular meeting of the board the preceding year. A department shall be discontinued when it fails to hold a regular meeting for two successive years.

A MEMBER: I don't see any difference between the two articles, that is Section 1 of the two articles.

The Chair asked Mr. Owen from this time on merely to explain the differences.

ARTICLE V—DEPARTMENTS

SECTION 1. The following departments are now (1912) in existence, to wit: The departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training, Art, and Technical Education; sixth, of Kindergarten Education; seventh, of Music Education; eighth, of Secondary Education; ninth, of Business Education; tenth, of Child Study; eleventh, of Physical Education; twelfth, of Natural Science Instruction; thirteenth, of School Administration; fourteenth, the Library Department; fifteenth, of Special Education; sixteenth, of School Patrons; seventeenth, of Rural and Agricultural Education.

SEC. 2. The active members of the Association, and no others, are members of each department of the Association.

SEC. 3. All meetings of all departments shall be held at the time and place of the annual meeting of the Association, except the Department of Superintendence, which may hold its annual meeting in February of each year or at such other time as may be determined by said department, subject to the approval of the Executive Committee of the Association.

SEC. 4. The object of the meetings of the departments shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be prepared by the respective presidents in conference with and under the general direction of the President of the Association. Each department shall be limited to two sessions with formal programs, unless otherwise ordered by the President of the Association, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 5. The officers of each department shall consist of a president, a vice-president, and a secretary, who shall be elected at the last formal session of the department to serve one year and until their successors are duly elected, and who shall at the time of their election be active members of the Association.

SEC. 6. The secretary of each department shall, in addition to performing the duties usually pertaining to his office, furnish the Secretary of the Association a copy of the proceedings of the meetings of the department for publication.

SEC. 7. All departments shall have equal rights and privileges, with the exception stated in Section 3 of this article. They shall be named in Section 1 of this article in the order of their establishment and shall be dropped from the list when discontinued. Each department may be governed by its own regulations in so far as they are not inconsistent with the Act of Incorporation, or these By-Laws.

A new department may be established by a two-thirds vote of the Board of Directors taken at a regular meeting of the board or by a two-thirds vote of the active members at any annual business meeting; *provided*, That a written application for said department, with title and purpose of the same, shall have been made at the regular meeting of the board next preceding the one at which action is taken, or at the preceding annual business meeting, by at least twenty-five members engaged or interested in the field of labor in the interest of which the department is purposed to be established. A department already established may be discontinued by the Board of Directors upon a two-thirds vote taken at a regular meeting, or by a two-thirds vote of the active members at any annual business meeting; *provided*, That announcement has been made of the proposed action at a regular meeting of the board the preceding year, or at the preceding annual business meeting. A

department shall be discontinued when it fails to hold a regular meeting for two successive years.

MR. OWEN (reading): Section 2, as proposed by the members:

The active members of the Association, and no others, are members of each department of the Association.

And the National Education Association report is:

The active members of the Association having the right to vote in the Association, and no others, are members of each department of the Association.

And in Section 3 the members propose in the last sentence "subject to the approval of the Executive Committee of the Association." And the National Education Association committee's recommendation on the same subject and the last line of the section is "subject to the approval of the Board of Directors of the Association." I move the adoption of those changes as an amendment to the motion already made.

A MEMBER: I second the motion.

MR. SPRINGER: Permit me to call your attention to another thing, that is, next to the last sentence in Section 8: "By a two-thirds vote of the active members at any annual business meeting." I suggest the change there, that it be, "By a two-thirds vote of the active members at any business meeting of the active members." I suggest that as a substitute.

PRESIDENT PEARSE: Is there any objection to the change? Hearing none, it is made.

MR. KIRK: Section 3 of this Article V reads that, "All meetings of all departments shall be held at the time and place of the annual meeting of the Association, except the Department of Superintendence."

PRESIDENT PEARSE: The Educational Council has been included with the Department of Superintendence.

MR. KIRK: I understand, Mr. Chairman, that all of Section 3 has been referred to a committee for one year?

PRESIDENT PEARSE: The Chair does not so understand. The Chair understands that there has been a suggestion made as to the provision, "All meetings of all departments shall be held at the time and place of the annual meeting of the Association, except the Department of Superintendence" and Educational Council. I will entertain a motion—

MR. KIRK: I am sure the members of this Association do not wish to wholly destroy the utility of any department. It turns out that there is a new force which we have to deal with. We want to be loyal to the National Education Association and come to every meeting that it has, but between the Rocky Mountains and the Alleghanies, the summer terms of the universities and the normal schools constitute an enormous force—a large influence that has to be recognized and dealt with. The summer term has nearly doubled in attendance during the past few years. The faculties in many universities and in most of the normal schools cannot possibly get away to attend the summer meetings of the National Education Association.

A MEMBER: Will Mr. Kirk yield the floor a minute?

PRESIDENT PEARSE: Mr. Kirk yields.

MR. SCRIBNER: I move that the whole of Section 3, Article V be referred to the committee to be reported on in a year.

MR. KIRK: I second the motion.

PRESIDENT PEARSE: The motion is made and seconded that Section 3 of Article V be referred to a committee for one year. All in favor of the motion say Aye, contrary, No. Motion carried.

A MEMBER: I move that the substitute for Article V as changed, with exception of Section 3, be adopted.

Motion seconded and duly carried.

MR. SPRINGER: I move the adoption of Article VI as reported by the National Education Association committee, as follows:

ARTICLE VI—COMMITTEES

SECTION 1. On the first day of each annual meeting of the Association the President shall appoint a Committee on Resolutions, consisting of seven active members, and a Committee on Necrology, consisting of five active members; and on the second day of such meeting he shall appoint a Committee on Nominations, consisting of one active member from each state, territory, and district, represented at the meeting. Each state, territorial, and district representative shall be appointed on the nomination of the active members in attendance from said state, territory, or district; *provided*, That five or more active members having the right to vote in the Association participate in said nomination in accordance with these By-Laws; and *provided further*, That in case of the failure of the active members of any state, territory, or district to nominate a member of the nominating committee in accordance with these By-Laws, the President shall appoint an active member from said state, territory, or district, to serve on said committee. At the regular meeting of the Board of Directors on the first day of the annual meeting, the President shall appoint an Auditing Committee consisting of three directors. The chairman of each of the foregoing committees shall be designated by the President of the Association at the time of its appointment.

SEC. 2. The meetings of active members to nominate members of the nominating committee shall be held on the first day of the annual meeting of the Association, at such time and places as shall be designated in the annual program by the President of the Association.

SEC. 3. The Committee on Nominations shall meet on the third day of the annual meeting at 9:30 A.M., at a place designated by the President of the Association, and shall nominate persons for the following offices in the Association, to wit: one person for President, twelve persons for Vice-Presidents, one person for Treasurer, and one person from each state, territory, and district in the United States as a member of the Board of Directors. It shall report to the active members at their annual business meeting.

SEC. 4. The Committee on Resolutions shall report at the last session of the annual meeting and all resolutions relating to the policy of the Association shall be referred to said committee, without discussion.

SEC. 5. The Auditing Committee shall audit the Secretary's and the Treasurer's accounts and make a thoro examination of the finances of the Association. It shall report to the new Board of Directors at the first regular meeting of the board.

SEC. 6. The Committee on Necrology shall prepare for the volume of *Proceedings* a list of the active and corresponding members that have died during the year, accompanied by memorial sketches whenever practicable.

SEC. 7. Within thirty days prior to the time of the annual meeting of the Association, the President, with the advice and consent of the Secretary and the Treasurer, shall appoint a competent person or persons, who shall examine the securities of the Permanent Fund held by the Board of Trustees, and certify in writing to their condition to the Board of Directors at the first regular meeting of the board held during the week of the annual meeting.

MR. OWEN: I move the adoption of the substitute.

ARTICLE VI—COMMITTEES

SECTION 1. On the first day of each annual meeting of the Association the President shall appoint a Committee on Resolutions, consisting of seven active members, and a Committee on Necrology, consisting of five active members, and on the third day of such meeting he shall appoint a Committee on Nominations, consisting of one active member from each state, territory, and district represented at the meeting. Each state, territorial, and district representative shall be appointed on the nomination of the active members in attendance from said state, territory, or district; *provided*, That three or more active members participate in said nomination in accordance with these By-Laws; and *provided further*, That in case of the failure of the active members of any state, territory, or district to nominate a member of the nominating committee, in accordance with these By-Laws, the President shall appoint an active member from said state, territory, or district, to serve on said committee. At the regular meeting of the Board of Directors on the first day of the annual meeting, the President shall appoint an Auditing Committee consisting of three active members of the Association, no one of whom shall be either a

trustee or a director; to this committee shall be referred the report of the expert accountant, together with the communication of the President transmitting the same, as provided in Section 6 of this article; and the committee shall report its findings at the meeting of active members. Further it is provided that at the annual business meeting of the Association in 1912, the President shall appoint a Committee on Teachers' Welfare, consisting of seven members, all of whom shall be active members of the Association. The terms of the members so appointed shall expire as follows: One-seventh in one year, one-seventh in two years, one-seventh in three years, one-seventh in four years, one-seventh in five years, one-seventh in six years, one-seventh in seven years. At the annual business meeting of the year 1913 and each year thereafter, the President shall appoint one member of such committee to fill vacancy created as above. The chairman of each of the foregoing committees shall be designated by the President of the Association at the time of its appointment.

SEC. 2. The meetings of active members present from the several states, territories, etc., to nominate members of the nominating committee, shall be held on the first day of the annual meeting of the Association, at such time and places as shall be designated on the annual program by the President of the Association.

SEC. 3. The Committee on Nominations shall meet on the fourth day of the annual meeting at 9:00 A.M., at a place designated by the President of the Association, and shall nominate persons for the following offices in the Association, to wit: one person for President, eleven persons for Vice-Presidents, one person for Treasurer, and one person from each state, territory, and district in the United States as a member of the Board of Directors. It shall report to the active members at their annual business meeting.

SEC. 4. The Committee on Resolutions shall report at the annual business meeting of active members, and, except by unanimous consent, all resolutions shall be referred to said committee, without discussion. This committee shall receive and consider all resolutions proposed by active members, or referred to it by the President; some time during the second day of the annual meeting of the Association the committee shall hold a meeting, at a place and time to be announced in the printed program, for the purpose of receiving proposed resolutions and hearing those who may wish to advocate them.

SEC. 5. The Committee on Necrology shall prepare for the published *Proceedings* a list of the active and corresponding members that have died during the year, accompanied by memorial sketches whenever practicable.

SEC. 6. The Committee on Teachers' Welfare shall collect data bearing on the promotion of the teachers' physical, financial, and educational advancement. It shall keep such information corrected from time to time as may be required, in proper form to use in the promotion of the teachers' welfare.

SEC. 7. Within thirty days prior to the time of the annual meeting of the Association, the President shall appoint a competent person, firm, or corporation licensed to do business as expert accountants; the accountants so appointed shall examine the accounts, papers, and vouchers of the Secretary, the Treasurer, and the Board of Trustees, and compare the same, and shall also examine the securities of the Permanent Fund held by the Board of Trustees. The report of the said accountants shall be filed with the President before the opening day of the annual meeting of the Association, and shall be by him submitted with such comments as he may think proper, to the Board of Directors, at their meeting held on the first day of the annual meeting of the Association.

MR. OWEN: I move the adoption of the substitute. I will refer to parts of it. Now in Section 1 as printed, on the fourth line, "On the third day of such meeting he shall appoint a nominating committee." That change was made to give the President more time to select the committee. I simply call your attention to Article VI of the National Education Association committee, wherein it differs from Article VI on the right-hand column. I will begin to read at the italicized matter.

At a regular meeting of the Board of Directors on the first day of the annual meeting, the President shall appoint an Auditing Committee, consisting of three active members of the Association, no one of whom shall be either a trustee or a director; to this committee shall be referred the report of the expert accountant, together with the communication of the President, transmitting the same as provided in Section 6 of this article; and the committee shall report its findings at the meeting of active members. Further it is provided that at the annual business meeting of the Association in 1912 the President shall appoint a Committee on Teachers' Welfare, consisting of seven members, all of whom shall be active members of the Association. The terms of the members so appointed shall expire as follows: One-seventh in one year, one-seventh in two years, one-seventh in three years, one-seventh in four years, one-seventh in five years, one-seventh in

six years, one-seventh in seven years. At the annual business meeting in 1913 and each year thereafter, the President shall appoint one member of such committee to fill the vacancy created as above. The chairman of each of the foregoing committees shall be designated by the President of the Association at the time of its appointment.

I shall not go into that any further, but on Section 3 there is a change as to time in which the nominating committee shall meet. It was said 9:00 A.M., instead of 9:30 as shown in Section 3 in this report. There was a correction in the same paragraph, eleven persons for Vice-Presidents, because one of them we have already provided for and that is the retiring president shall become the First Vice-President, instead of "One person for President, twelve persons for Vice-Presidents."

In reference to Section 4: here is a provision that is new:

And except by unanimous consent all resolutions shall be referred to said committee, without discussion. This committee shall receive and consider all resolutions proposed by active members, or referred to it by the President; some time during the second day of the annual meeting of the Association the committee shall hold a meeting at a place and time to be announced in the printed program, for the purpose of receiving proposed resolutions and hearing those who may wish to advocate them.

Section 5, no change. Section 6, I need not read. Section 7, I will read.

PRESIDENT PEARSE: Read that.

MR. OWEN (reading):

SEC. 7. Within thirty days prior to the time of the annual meeting of the Association, the President shall appoint a competent person, firm, or corporation licensed to do business as expert accountants; the accountants so appointed shall examine the accounts, papers, and vouchers of the Secretary, the Treasurer, and the Board of Trustees, and compare the same, and shall also examine the securities of the Permanent Fund held by the Board of Trustees. The report of the said accountants shall be filed with the President before the opening day of the annual meeting of the Association, and shall be by him submitted with such comments as he may think proper, to the Board of Directors, at their meeting held on the first day of the annual meeting of the Association.

MR. SCRIBNER: That provision of Sections 1 and 6, Article VI, with reference to the appointment of a Committee on Teachers' Welfare, is new matter; I move that the same be referred to a committee for report in a year. It should lie over for a year in order to legally bring it before us.

Motion duly seconded and carried that portions of said sections be so referred to a committee.

PRESIDENT PEARSE: Moved and seconded that the article as read and amended shall be accepted as a substitute for the other; carried.

SECRETARY SHEPARD: I wish to ask, as a member, for the ruling of the Chair upon one or two points. The By-Laws provide that amendments may pass by a two-thirds vote of the members present. Does that mean the members present at the convention or members present at the meeting?

PRESIDENT PEARSE: The Chair rules that it means the members present and voting.

SECRETARY SHEPARD: It appears at this meeting that there are now about 500 present; does it mean the number present at the moment the question is proposed?

PRESIDENT PEARSE: Yes.

SECRETARY SHEPARD: As to the rule, the By-Laws provide that there shall be two-thirds of the members voting in favor of or against an amendment. Now admitting that this means two-thirds of the members present at this moment; there has been no test as to whether the motions that have been passed have been by a two-thirds vote of the actual members present. Therefore, I think it is a serious question.

PRESIDENT PEARSE: The question has been raised, and the Chair will rule. The Chair has full knowledge of the fact that a two-thirds vote is necessary on all these questions of amendment, and the Chair has ruled in the light of that knowledge, on all these propositions. There has been no question raised as to the fact that two-thirds of the members present and voting, voted in favor of each proposition which has been declared carried. Results, therefore, stand as declared. If at any time the question is raised

as to whether any proposition has the required two-thirds vote, the Chair will ascertain the number by counting.

MR. SPRINGER: I move that the next Article, VII, be adopted as prepared by the National Education Association committee as follows:

ARTICLE VII—MEETINGS

SECTION 1. A stated meeting of the Association, of the Council of Education, and of each department shall be held annually at such time and place as shall be determined by these By-Laws or by the Board of Directors or the Executive Committee acting for the board. An annual meeting of the Association and its subordinate bodies may be omitted for an extraordinary cause, upon the written consent of two-thirds of the directors of the Association, obtained by the Executive Committee.

SEC. 2. The annual meeting of the Association shall be held in July, beginning on a day determined by the Executive Committee. Two sessions shall be held daily, unless otherwise ordered by the President of the Association. The annual business meeting of the active members shall be held on the third day of the annual meeting at 12:30 P.M. A regular meeting of the Board of Directors shall be held on the first day of the annual meeting at 11:30 A.M. The first regular meeting of the new Board of Directors shall be held on the third day of the annual meeting at 4:30 P.M., the President-elect presiding. Special meetings of the Board of Directors may be called by the President upon the written request of twenty-five members of the board. The Board of Trustees shall hold its annual meeting at some convenient time during the annual meeting of the Association. Special meetings of the Board of Trustees may be held at such times and places as the board or the chairman shall determine. Due notice of all meetings of the board shall be given to every member of the board by the secretary of the board.

A MEMBER: Second the motion.

MR. OWEN: I move to substitute for Article VII.

ARTICLE VII—MEETINGS

SECTION 1. A stated meeting of the Association, of the Council of Education, and of each department shall be held annually at such time and place as shall be determined by the Board of Directors or the Executive Committee acting for the board in accordance with these By-Laws. An annual meeting of the Association and its subordinate bodies may be omitted for an extraordinary cause, upon the written consent of two-thirds of the directors of the Association, obtained by the Executive Committee.

SEC. 2. The annual meeting of the Association shall be held in July, beginning on a day determined by the Executive Committee. Two sessions shall be held daily, unless otherwise ordered by the President of the Association. The annual business meeting of the active members shall be held on the fourth day of the annual meeting at 11:00 A.M. A regular meeting of the Board of Directors shall be held on the first day of the annual meeting at 10:30 A.M. The first regular meeting of the new Board of Directors shall be held as soon as practicable and within twenty-four hours after the close of the last session of the annual meeting, the place and time of the meeting to be announced in the printed program. The Board of Trustees shall hold its annual meeting at some convenient time and immediately following the meeting of the new Board of Directors referred to above in this section. Special meetings of the trustees may be called by the chairman, and shall be called on request of the majority of the Board of Trustees. Due notice of all meetings of the Board of Trustees shall be given to every member of the board by the secretary thereof.

MR. OWEN: I will proceed at once to point out the differences: In Section 2, it states the annual business meeting of the active members shall be held on the fourth day at 11:00 A.M., instead of the third day at 12:30; that a regular meeting of the Board of Directors shall be held on the first day of the annual meeting at 10:30 A.M.; that the first regular meeting of the new Board of Directors shall be held as soon as practicable and within twenty-four hours after the last session of the annual meeting; also that the Board of Trustees shall hold their annual meeting at some convenient time and immediately following the meeting of the new Board of Directors referred to above in this section. Special meetings of the Trustees may be called by the chairman and shall be called on request of the majority of the Board of Trustees.

Motion to adopt substitute seconded.

MR. SCRIBNER: Move to amend that portion of the substitute which fixes the hour of the annual meeting, in view of our experiences today to change the hour from 11 o'clock to 10 o'clock A.M.

Motion seconded.

MR. HALL: It is impossible to have the annual business meeting at 10 o'clock in the morning on account of the meeting of the nominating committee.

MR. OWEN: Inasmuch as this change will require considerable checking up with other changes, it would be wise to let the time remain as proposed in the substitute motion, at 11 o'clock.

MR. SCRIBNER: In view of that explanation, I will withdraw my motion.

PRESIDENT PEARSE: Motion made is withdrawn. The question now is on the adoption of the substitutes for Article VII as you have heard it. All in favor of the adoption signify by saying Aye; contrary, No. Motion carried.

MR. SPRINGER: I move that Article VIII of the committee's report be adopted as follows:

ARTICLE VIII—PROCEEDINGS

SECTION 1. The proceedings of the meetings of the Association, the Council, and the department shall be published in a volume under the direction of a committee consisting of the permanent Secretary, the President, and the first Vice-President; *provided*, That in the opinion of the Board of Trustees the funds of the Association warrant the publication. Each member of the Association shall be entitled to a copy of the volume of *Proceedings*. Associate members must make written application to the Secretary on or before September 1 for a copy in order to obtain it. Corresponding members, and active members whose dues are paid, will receive the volume without written application.

SEC. 2. No paper, lecture, or address shall be read before the Association or any of the departments in the absence of its author, without the approval of the President of the Association or of the departments, nor shall any such paper, lecture, or address be published in the volume of *Proceedings*, without the approval of the Board of Directors or the Executive Committee.

LINCOLN P. GOODHUE, of Chicago: With reference to Article VI, which has been passed by: Am I right in believing that final action on Article VI was omitted intentionally or has it been adopted? Discussion was had as to a portion of Section 1 in Article VI; then the Chair's attention was called by the Secretary to some rulings; no further attention has been paid to Article VI: is that correct?

PRESIDENT PEARSE: The Chair is informed that that is correct. If no objection is heard, the Chair will entertain at this time a correct motion for the adoption of Article VI, which has been discussed heretofore. The Chair hears no objection.

Motion duly made, seconded, and carried.

MR. OWEN: Now the question arises as to Article VIII. I move that the substitute for Article VIII be adopted, as proposed by members, and printed, leaving out the word "permanent," where it has reference to "permanent Secretary," as follows:

ARTICLE VIII—PROCEEDINGS

SECTION 1. The proceedings of the meetings of the Association, the Council, and the departments shall be published under the direction of a committee consisting of the President, the First Vice-President, and the Secretary, the First Vice-President acting as chairman of the committee; *provided*, That in the opinion of the Executive Committee the funds of the Association warrant the publication. Each member of the Association shall be entitled to a copy of the *Proceedings*. Associate members must make written application to the Secretary on or before November 1 for a copy in order to obtain it. Corresponding members, and active members whose dues are paid, will receive the published proceedings without written application.

SEC. 2. No paper, lecture, or address shall be read before the Association or any of the departments in the absence of its author, without the approval of the President of the Association or of the departments interested, nor shall any such paper, lecture, or address be published in the *Proceedings*, without the approval of the Executive Committee.

Motion seconded and duly carried.

MR. SPRINGER: Move the adoption of Article IX of the committee's report

Motion seconded.

ARTICLE IX—ELECTIONS, QUORUM

SECTION 1. The certificate of membership, in connection with the published list of active members, shall be accepted as evidence that members are entitled to vote.

SEC. 2. Representatives from twenty-five states and territories shall constitute a quorum in all meetings of active members and of the Board of Directors.

MR. SCHULER: With reference to Section 1 of Article IX, is that reference to the effect that a member must carry his certificate of membership, together with a published list? In other words, it means no admission if the names are not on the list; cutting out everybody whose name is not on the list.

PRESIDENT PEARSE: The Chair understands that the published or official list may be consulted in connection with a certificate of membership; that is, if any case arises in which the certificate of membership is not considered sufficient evidence. It may also be possible that a member does not have his certificate of membership and yet his name may appear upon the list.

A MEMBER: Is it necessary that a member's name appear upon the list and also that he have his certificate of membership?

MR. OWEN: Is it to be understood a name is considered "published" only when printed?

PRESIDENT PEARSE: The Chair is of the opinion that an error has been made and the word "official" should appear. We can consider the question.

MR. SCHULER: Move to strike out the word "published" and make it "official."

A MEMBER: Motion seconded.

MR. OWEN: I believe in striking out the words "in connection with the published list of active members." The certificate of membership should be sufficient evidence of the right to vote.

MR. SCRIBNER: Does the word "published" mean "printed"?

MR. SCHULER: Certainly, it means printed; I don't see why there should be any objection to striking it out.

PRESIDENT PEARSE: Moved and seconded that the word "official" be inserted for the word "published."

MR. OWEN: Why couldn't we strike out the words "in connection with the published list of active members"? I make that as an amendment to the motion.

A MEMBER: I second the motion that the words "in connection with the published list of active members" be stricken out.

MR. SCHULER: It seems to me that there was something said a few moments ago that whenever any member of this Association proceeds to the hall where he wants to vote, he will have to show his certificate of membership for the year and it seems to me that certificate, signed by the Secretary and carried on his person, with the official list, would be better, as he might lose his certificate of membership and if he didn't have it he couldn't get in.

MR. SPRINGER: A suggestion has been made to this effect: If you lose your certificate of membership you might be in the same condition and predicament that some of the persons who are present were today, when they had to be admitted by a committee who had no other evidence than the official list of members gotten up by the Secretary, and I think it would be better to retain both, with the word "official" inserted instead of "published."

PRESIDENT PEARSE: I will put the motion as to striking out the words "in connection with the published list of active members."

Whereupon the motion was duly put and lost.

PRESIDENT PEARSE: Now we will vote on the motion to insert the word "official" instead of the word "published," making it read "official list of active members."

Whereupon the motion was duly put and carried.

MR. SPRINGER: I move that Article X of the National Education Association committee's report be adopted as follows:

ARTICLE X—AMENDMENTS

SECTION 1. These By-Laws may be altered or amended at the annual business meeting of the active members by unanimous consent, or by a three-fourths vote of the active members present if the alteration or amendment shall have been substantially proposed in writing at the annual business meeting next preceding the one at which action is taken, and due announcement has been made of the proposed action.

SEC. 2. Any of the provisions of any Section of Articles VI or VII of these By-Laws may be suspended for a single session of an annual meeting by a vote of three-fourths of the active members present.

A MEMBER: I second the motion.

PRESIDENT PEARSE: Moved and seconded that Article X be adopted.

MR. OWEN: There is one particular in which I wish to move a change. I observe that Article X, as appearing in the suggestions of members, is not parallel with Article X in the report of the National Education Association committee. Therefore in order to keep the matter clear, I would like to make a motion that Article XI of the members' suggestions be substituted for Article X of the National Education Association committee's report, and that it be renumbered Article X. I wish to read another change in the third line of Article XI in the members' substitute: "By a two-thirds vote of the active members present" is used instead of as it appears in Article X of the National Education Association report, "By a three-fourths vote of the active members present." The word "two-thirds" is used instead of "three-fourths."

ARTICLE XI—AMENDMENTS

SECTION 1. These By-Laws may be altered or amended at the annual business meeting of the active members by unanimous consent, or by a two-thirds vote of the active members present if the alteration or amendment shall have been substantially proposed in writing at the annual business meeting next preceding the one at which action is taken; due announcement of the proposed action shall be made in the annual published proceedings.

MR. SCRIBNER: I second the motion for the adoption of the substitute.

PRESIDENT PEARSE: Moved and seconded that Article XI, as proposed by the members' committee, and amended, be substituted for Article X of the National Education Association committee, and that it be numbered Article X. Are you ready for the question?

MR. OWEN: Before we proceed I would make the suggestion that Article X of the members' substitute as printed, be referred to a committee as has been done with other portions of the report. I make that as an amendment to the motion.

A MEMBER: I second the amendment.

Amendment carried.

Whereupon the motion to adopt as amended was duly put and carried.

PRESIDENT PEARSE: Now a motion is in order for the adoption of the By-Laws as approved *seriatim*, of course with the exception of those parts which have already been referred for action in one year.

MR. SPRINGER: I think the question of the adoption of these substitutes is one that requires the utmost care. I have written here a form of motion which I think covers the case, to this effect: I move that the By-Laws, as substituted for the report of the committee on proposed amendments appointed at the Denver meeting, which report was received at the Boston meeting, and at the San Francisco meeting laid on the table to be acted upon after one year, be now adopted as a whole.

That recites the history and gives the legal status of the situation.

Whereupon said motion was duly seconded and carried, the chairman declaring the By-Laws so adopted, the By-Laws of the National Education Association of the United States.

D. B. JOHNSON, of South Carolina: In accordance with the Constitution, I have a notice of an amendment to offer:

PRESIDENT PEARSE: Mr. Johnson.

MR. JOHNSON: This amendment under the rules is to lie on the table for a year and then be considered at the next meeting.

In order to preserve the national character of the National Education Association and to maintain the allegiance of all the teachers of all the states of the United States and thus insure the continued usefulness of the Association to the cause of education in this country, the President, Vice-Presidents, and other elective officers of the Association shall be voted for by states and territories, each state and territory being given its fair and just quota of votes in accordance with the rules governing the representation of each state and territory now in force, for the presidential conventions of both of the great parties; the vote of each state and territory being cast by the director of the state or territory in accordance with a majority vote of the active members in attendance upon the Association from each state and territory; *provided*, No state or territory shall be entitled to vote a greater number of votes than the number of active members enrolled in that state or territory; the election of President and other elective officers of the Association being determined by a majority of the votes thus cast in the meeting of the National Education Association held for the election of such officers.

A MEMBER: I move the resolution be referred according to rule.

Whereupon the motion was duly seconded and carried.

MR. HALL: I offer the following resolution:

Resolved, That the President of the National Education Association be and he is hereby authorized to appoint a committee of five active members of the Association to prepare recommendations for amendments to the Charter of the National Education Association and this committee be instructed to report its recommendations at the next meeting of the active members.

A motion was made and seconded to adopt the resolution.

S. Y. GILLAN, of Wisconsin: Mr. President.

PRESIDENT PEARSE: Mr. Gillan.

MR. GILLAN: As a substitute for Mr. Hall's motion, I move, according to rule, that the President appoint a committee of five members whose duty it shall be to present to the active members at their regular meeting in 1913 a draft of proposed changes, amendments, alterations, or other modifications in the act of Incorporation of the National Education Association of the United States, approved by special act of Congress, June 30, 1906; such draft of proposed changes, if approved by a majority of the active members voting at the regular meeting for 1913, or such part thereof as may be so approved, to be presented to the Sixty-third Congress of the United States at its first session, with the formal request of the active members of this body that such changes, amendments, or alterations be enacted into law as a part of the said Act of Incorporation. Said committee to file their report, not later than May 1, 1913, with the Secretary, who shall mail a copy of the report to each active member, not later than June 1, 1913.

MR. SPRINGER: I wish to call the gentleman's attention to one phrase, I think he says "a majority vote." I think that is a two-thirds vote according to our present Articles of Incorporation. I make the suggestion as to that change.

PRESIDENT PEARSE: This Association has no definite rule as to requesting amendments to its Articles of Incorporation by a majority vote.

A MEMBER: I second the motion to substitute as originally made.

The maker of the original motion accepted the substitute.

Whereupon the substitute motion was duly put and carried.

MR. GILLAN: I wish to offer an amendment to the By-Laws, simply to get it before this meeting, that it may be voted upon one year from now, as follows:

ARTICLE IX

If not less than thirty days before any regular meeting of the Association, a petition signed by not less than one hundred active members, requesting the resignation of an officer, shall be filed with the Secretary, unless such officer shall present his resignation at the regular meeting of the active members next following the filing of such petition, a recall vote shall be taken, and if two-thirds of the active members voting shall favor the recall of such officer, a vacancy shall thereupon exist, to be filled in such manner as provided for filling vacancies; and an officer thus recalled shall be ineligible for appointment or election to the same office during a period of two years after such recall.

By motion duly made and carried the said amendment was referred to a committee for action next year.

MISS HALEY: I have here an application for a new department entitled "Classroom Teachers' Department."

PRESIDENT PEARSE: Will you read it?

MISS HALEY (reading):

We the undersigned, classroom teachers, active members of the National Education Association, hereby make application to have a new department to be known as the "Classroom Teachers' Department" added to the list of departments of the National Education Association:

Grace DeGraff, Portland, Ore.
Lily E. M. Patterson, Princeton, Ill.
Mabel F. Smith, Topeka, Kans.
Alma Reed, Eudora, Kans.
Ida Reed, Benton Harbor, Mich.
Lura A. Griswold, Kansas City, Mo.
Emma A. Dodson, Terre Haute, Ind.
Bertha Dodson Neyhouse, Poseyville, Ind.
Edna May Gifford, Elgin, Ill.
Lucinda E. D. Lafuse, College Corner, Ohio
Genevieve Washburn, Minneapolis, Minn.
Mary A. Starkey, Milwaukee, Wis.
Helen M. Holden, Milwaukee, Wis.
Katherine C. Farley, Milwaukee, Wis.
Katherine J. Muller, Minneapolis, Minn.
Margaret E. Cooper, St. Paul, Minn.
Julia Holth, St. Paul, Minn.
Nellie Minehan, Milwaukee, Wis.
Mary E. Hannan, Milwaukee, Wis.
Mary C. Kerr, Baltimore, Md.
Grace Baldwin, Minneapolis, Minn.
Julia H. Vaughan, Minneapolis, Minn.
Lydia L. Hazleton, Minneapolis, Minn.
Ida L. M. Fursman, Chicago, Ill.
Mary Cone Harris, Minneapolis, Minn.
Annie L. Donohue, Minneapolis, Minn.
Rose E. Rafferty, Chicago, Ill.
Minnie L. Spawr, Chicago, Ill.
D. W. Springer, Detroit, Mich.
Elizabeth A. Smyth, Baltimore, Md.
Mollie K. Hobbs, Baltimore, Md.
Martha Stromberg, Baltimore, Md.

A MEMBER: I move it be referred to a committee.

MISS HALEY: Under the By-Laws this body has power to receive such application and act upon it next year.

Whereupon motion was duly made and carried that the application be received and referred to a committee for action next year.

A MEMBER: I move we adjourn.

PRESIDENT PEARSE: The Chair would not feel it right that this meeting should come to a close after the members have been sitting here all thru this hot afternoon, transacting the vital business of this Association, and that the members should separate without receiving the sincere thanks of the Chair. Not in many years, in fact never before in the history of this Association, so far as my knowledge goes, and it goes back thru most of the meetings to the one presided over by our good friend Dr. Bicknell, has the Association sat so assiduously and continuously, the members giving their best attention to the business of the Association, as they have done this afternoon.

I want to say I am very slow to believe that these staying qualities are possessed only by the teachers of Illinois. I have no doubt that their representatives are here, but I am conscious that there are many here from other states who have shown that they also are "stayers" and not "quitters"; and they have stayed here and attended to the important business of the Association.

I want to thank all the members of the Association, these faithful brothers and sisters at my right and left, and these equally faithful but more conspicuous, who sit behind me,

for the assistance that they have rendered the Chairman at this meeting, in the conduct of the important business which has occupied us this afternoon.

Motion for adjournment is now in order.

A MEMBER: I move we adjourn.

A MEMBER: Second the motion.

PRESIDENT PEARSE: It has been moved and seconded that we adjourn. Before we adjourn, I ought to transmit one other item of news to you. I requested especially, and supposed that my request would be complied with, that the excursions for our benefit which were going out this afternoon, be held until after the business meeting. I informed you at the last meeting that this would be done. The Chair must confess himself to be a hapless prevaricator in that announcement; I understand that the excursions have departed without us, and those of us who have attended to the business of the day have done so at the sacrifice of a cool and sociable ride. I commiserate you but I also compliment you upon your staunch loyalty and your faithfulness to the business of your Association.

The meeting stands adjourned until the next regular annual business meeting.

Whereupon the annual business meeting of active members for 1912 adjourned, sine die.

IRWIN SHEPARD, *Secretary*

Approved,

CARROLL G. PEARSE, *President*

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF THE NATIONAL EDUCATION ASSOCIATION FOR THE YEAR 1911–12

CHICAGO, ILL., MONDAY, JULY 8, 1912

The meeting was called to order in the Masonic Hall of the Auditorium Hotel by President Pearse at 9:30 A.M. The roll was called, resulting as follows:

Present: Directors Carroll G. Pearse, of Wisconsin; Katherine D. Blake, of New York; Irwin Shepard, of Minnesota; John W. Cook, of Illinois; Edwin G. Cooley, of Illinois; Oscar T. Corson, of Ohio; James M. Greenwood, of Missouri; Lorenzo D. Harvey, of Wisconsin; James Y. Joyner, of North Carolina; Charles I. Parker, of Illinois; Joshua Pike, of Illinois; A. R. Taylor, of Illinois; Ella Flagg Young, of Illinois; John H. Phillips, of Alabama; A. J. Matthews, of Arizona; George B. Cook, of Arkansas; James B. Ragan, of Colorado; William M. Davidson, of District of Columbia; Clem Hampton, of Florida; Grace M. Shepherd, of Idaho; William H. Campbell, of Illinois; Thomas A. Mott, of Indiana; O. P. Bostwick, of Iowa; John MacDonald, of Kansas; Thomas D. Boyd, of Louisiana; Robert J. Aley, of Maine; Robert J. Fuller, of Massachusetts; E. E. Scribner, of Michigan; C. G. Schulz, of Minnesota; E. E. Bass, of Mississippi; John R. Kirk, of Missouri; G. W. A. Luckey, of Nebraska; W. E. Garrison, of New Mexico; Grace C. Strachan, of New York; F. M. Harper, of North Carolina; Edward M. Van Cleve, of Ohio; William F. Ramey, of Oklahoma; L. R. Alderman, of Oregon; Reed B. Teitrick, of Pennsylvania; D. B. Johnson, of South Carolina; J. J. Keyes, of Tennessee; George N. Child, of Utah; C. E. Beach, of Washington; M. P. Shawkey, of West Virginia; Emma J. Gardner, of Wisconsin.

On motion, it was voted that the following be elected to fill vacancies caused by resignations of directors:

James Ferguson, of California, in place of Mark Keppel, resigned.
Arthur D. Call, of Connecticut, in place of F. A. Verplanck, resigned.
W. H. Nye, of Montana, in place of C. A. Duniway, resigned.
W. J. Hunting, of Nevada, in place of Mrs. L. C. Booth, resigned.
George A. McFarland, of North Dakota, in place of W. E. Hoover, resigned.
C. G. Lawrence, of South Dakota, in place of M. M. Ramer, resigned.
D. S. Furman, of Texas, in place of Felix E. Smith, resigned.
Ira B. Fee, of Wyoming, in place of Charles O. Merica, resigned.
B. K. Purdum, of Maryland, in place of A. C. Willison, resigned.

Of these, the following were present: Directors James Ferguson, of California; B. K. Purdum, of Maryland; W. H. Nye, of Montana; George A. McFarland, of North Dakota; Ira B. Fee, of Wyoming.

Total number of directors present, fifty.

PRESIDENT PEARSE: The minutes of the last meeting of the Board of Directors will now be read.

SECRETARY SHEPARD: Mr. President, I have the minutes here as printed. They have been printed in the *Yearbook* and are doubtless well known to all the members. Do you wish to have them read?

PRESIDENT PEARSE: What is the pleasure of the directors?

DIRECTOR E. E. SCRIBNER, of Michigan: I move that the reading be suspended and the minutes approved as printed.

Motion seconded and carried.

PRESIDENT PEARSE: Since there seem to be no corrections, they will stand as printed. My attention has been called to a communication which it is desired to present on behalf of the National Council. I have asked Secretary Aley of the Council to present it at this time.

DIRECTOR R. J. ALEY, of Maine: Mr. Chairman, at the meeting of the Council held in San Francisco one year ago, the constitution of the Council was changed slightly, and thru an oversight at that time notice of the change was not brought to the attention of this body for approval. I desire at this time, on behalf of the Council, to bring before the Board of Directors the change and ask for the approval of this body.

President Keyes of the Council, perhaps fifteen months ago, sent out a letter to all members of the Council, raising the question as to whether it might not be better to have the meeting of the Council at a time different from the meeting of the National Education Association; the reason for that being that many of the most valuable members of the Council, due to the great growth of the summer-school notion over the country, these men being in demand for work in summer schools, find it impossible to attend this meeting. President Keyes received from 118 of the 120 members of the Council letters; 114 of these replies were favorable to the proposed change to a different time. In view of that almost unanimous vote by letter of the members of the Council, a committee was appointed at San Francisco to propose changes in the constitution. The change (and the other changes are simply minor ones to bring them into harmony with that) is in Article III, in regard to meetings:

There shall be a regular annual meeting of the Council held in connection with the Department of Superintendence of the National Education Association, or at such other time and place as the Executive Committee of the Council may designate.

If you will allow me to explain, I will say that that was put in that particular form so that in case the Department of Superintendence might see fit to go at some time to some remote part of the country, it would be possible for the Council to arrange a meeting more centrally located. The change does not bind the Council to hold its meeting at the time of the National Education Association, altho the intention is that in general it may be. "There may be special meetings of the Council," etc. There are no other changes except the changes made by that, which provide for filling of vacancies and the election of new members at the regular annual meeting, as provided for by the change. The proposed changes are printed in the annual volume of *Proceedings*, and doubtless all of you have had occasion to look them over.

Mr. Chairman, I move that the Board of Directors approve this change in the constitution of the Council.

A DIRECTOR: I second the motion.

DIRECTOR KATHERINE D. BLAKE, of New York: Does that mean that there will be no meeting of the Council in connection with the summer meeting?

DIRECTOR ALEY: Not necessarily. The same provision for special meetings that has existed from the formation of the Council still remains. It merely provides that the regular annual meeting may be held at the time of the Department of Superintendence or at such other time and place as the Executive Committee may provide. It does not forbid its being held with this meeting.

DIRECTOR ELLA FLAGG YOUNG, of Illinois: I did not quite understand when the officers were to be elected. Mr. Aley spoke of the annual meeting. It seems as if that is a movable feast.

DIRECTOR ALEY: I will read that clause again:

There shall be a regular annual meeting of the Council held in connection with the Department of Superintendence of the National Education Association or at such other time and place as the Executive Committee of the Council may designate.

DIRECTOR YOUNG: That makes it movable. It will be held at the time of the National Education Association or at such other time and place as the Executive Committee of the Council may designate.

DIRECTOR GRACE C. STRACHAN, of New York: That is, one might be elected secretary and serve for one month on a certain occasion, and at another time serve for nine months, or eleven months.

DIRECTOR ALEY: Your point of view is well taken, except as to the time. The officers are elected for three years, thru three annual meetings.

DIRECTOR STRACHAN: I thought it was for one year, as in the other departments, and the general Association. I should think that would be a serious difficulty in this amendment, the fact that there is really no meeting that can be called an annual meeting. It may be held one year in September and another year in October or June.

DIRECTOR SCRIBNER: I think the secretary of the Council explained the clause following. Won't you make that explanation again?

DIRECTOR ALEY: The idea of the Council was that in all cases the meeting would be held in connection with the meeting of the Department of Superintendence unless the department should go to some remote part of the country, as has been the case occasionally, where in all probability there would be a very small attendance of the Council. In that case it would be thought wise to hold a meeting at some central point, and the time would not necessarily be on the same dates as the National Education Association, but within a period of ten days preceding or following, at the same time of the year.

DIRECTOR STRACHAN: Of course that does not appear in the amendment, and there is nothing that would fix it. I should like to ask whether the attendance at the National Council is greater at the Department of Superintendence meeting or at the large meeting, as we consider this?

DIRECTOR ALEY: Of course we have only had one test of that, and that was at the St. Louis meeting. I have served as secretary at four meetings, and the attendance at St. Louis was very much larger than at any of the others. Of the 120 members, all were present at St. Louis but 35. At most meetings the attendance is much smaller than that; at all of the meetings, in fact, which I have attended.

DIRECTOR STRACHAN: Do superintendents form the majority of the members of the National Council?

DIRECTOR ALEY: I could not answer that offhand.

DIRECTOR STRACHAN: I thought that might explain the situation.

DIRECTOR ALEY: I should say that superintendents and normal school people perhaps do constitute the large majority.

DIRECTOR STRACHAN: Because teachers who are members would find it more difficult to get away in February than the superintendents.

PRESIDENT PEARSE: Are there further remarks?

DIRECTOR T. D. BICKNELL, of Rhode Island: Being somewhat familiar with the purposes of the Council and its organization, I think that the feeling was then that the Council should hold a very intimate and close relation to the annual meetings of the National Education Association, and these meetings have always been thus held. It seems to me that this separation of the two would weaken its influence and weaken its relations to the main body. I have only had this moment to think of it, but it seems to me that it is a deviation from the original principles of the Council and it seems to me also that it woud weaken the influence of the Council itself. While at any one particular meeting there may have been a large attendance, it seems to me that on the whole its association with the national meeting would give it a large value and also give to it a larger attendance.

PRESIDENT PEARSE: Are there further remarks?

DIRECTOR J. R. KIRK, of Missouri: There is a new element being injected into education that we cannot avoid recognizing, and that is the summer-school movement, reaching from six weeks to twelve weeks, in all the large universities between the Alleghanies and the Rockies, at least, and perhaps extending somewhat outside of those regions; and the faculties of the normal schools and of these large universities are very largely engaged in conducting the summer schools, so that it is practically impossible in the state normal schools and many of the state universities for the faculty members to get away to attend a summer meeting, especially in the case of the summer meeting being earlier than the 20th or 30th of July. But there is a new birth in education which is sending from many

cities the very pick of the flock, the choicest and most progressive of the teachers, the rank and file of teachers, into these summer schools the country over. We found in the Normal School Department at St. Louis, I believe, a larger number of normal-school faculty members (not presidents, but faculty members) than had ever been seen in a summer meeting of the Normal School Department, and I apprehend that we shall be worried a good deal in adjusting not only these several departments to that new condition in education, but it is very materially affecting the attendance of the National Education Association as a whole. It is doubted whether such an attendance can ever be had at the summer convention again as we used to have prior to four or five years ago. I merely mention those as features that are unavoidable.

Director G. W. A. Luckey, of Nebraska: I want to call attention to the fact, which President Aley has brought out, that there was an almost unanimous verdict of the Council in their own meeting that it would be important or would be valuable to change the meeting to the winter meeting, and it seems to me, other things being equal, that it would be a wiser policy to allow any organization to control itself than to control it from the outside, since they desire to make this change in their work.

It doesn't seem to me, and has not for a number of years, to be very damaging to the National Education Association as a whole to have a reduction of departments at this summer meeting. That has been one of the difficult things to attend to, it seems to me, for a number of years. We have so many departments, and our interests are so divided, that it is a difficult thing to attend to all of them, and so this change would not be a bad thing, probably, for the National Education Association itself.

There is one other feature of the National Education Association, in the line of what President Kirk has said, that has appealed to me very keenly in the last few years. The men, especially, and the women who work in the Council and in the Department of Higher Education and some other more advanced lines, are very strenuous in their work for at least nine or ten months in the year. Their work is trying. They are in demand, too, in the summer sessions. They are held at home. I find, too, that a great many men and women, when they get thru with their year's work, strenuous as it has been, feel that they can help their people more, and help other people more, by taking a rest during the summer or by travel and by study. Now, unfortunately the National Education Association comes at a time when you have to give up your study work or your travel work, because it is a month after your school closes before your meeting comes, and then it is a month or more after that before you are called back to your work. So you cannot go very far from home, and that is one thing that is breaking in upon the attendance at the National Education Association. Men prefer to go to some place where they can sit down in quiet study and reading or travel.

So it seems to me that this motion is quite in place, and it probably would be a good thing for the Council and not a bad thing for the National Education Association in reducing somewhat the number of interests that we have at this big meeting.

Director Bicknell: The point has been brought out clearly that was lying back in my mind. I hear from so many sources the suggestion that the disintegration of the National Association has begun, and if it has, of course this is along the line of the movement, which I should regard as one of the most unfortunate things in the history of education in this country. Of course, as to the matter of time limit, as to place and time of meeting, those are questions that are variable. But if, as at St. Louis, a month of the year, or several weeks of the year, could be obtained whereby the whole week or two weeks could be devoted to educational work, when the teachers were less disposed to travel or various interests which might occupy their attention, it would be of great value. But to me the most unfortunate thing that could occur to this Association, or to the country in educational work, would be the disintegration and destruction of this Association. I have been thru one or two crises in its history, and I think we are approaching another. I see so many signs of it that for one I want to put myself on record as standing for its

unity, its perpetuity, and its greater strength instead of its weakness. I therefore shall vote against the proposition on the grounds that I have named.

Director Aley: May I say just one word? I of course have not been connected with this Association the long time that Director Bicknell has, but I must very strongly disagree with him that there is any disintegration of this Association in sight. I do not believe that for a minute. I believe that the great meetings of the Department of Superintendence which are held at a different time have in no wise detracted from the meeting of the National Education Association. I think, on the other hand, they have increased interest in the National Education Association. Those meetings are always considered as a part of the National Education Association. Whenever the meetings of the Council are held, the thing that will be prominent is that it is the National Education Association, not a separate thing apart from the National Education Association. Further than that, I must believe that having the meeting at a time when it will accommodate more members will not mean a smaller attendance of Council members at this meeting. I believe that there will be at this meeting just as many Council members as would be here if the Council had its annual meeting at this time. I do believe that, with the strenuous work of the Council out of the way, the members of the Council who do attend this meeting, and who, I am convinced, will attend in as large numbers, will be able to give far more attention to the work of this meeting than when they come here and have six or seven long sessions of the Council that use up their strength and energy. I must very strongly disagree with the conclusions that Mr. Bicknell has reached.

Director J. W. Cook, of Illinois: There are two considerations that appeal to me in favor of this proposed change of time. First and most decidedly, the strongest consideration is the fact that the Council wishes it. You cannot run against the wishes of the Council in this matter and hope to have a successful meeting. Men will simply stay away. You cannot even lead them to the water, much less can you make them drink when they are there.

Secondly, the meeting of the Council occurs, as at present organized, immediately at the close of the year. We all come here already greatly overburdened with cares and with weariness incident in large part to the greatly increased duties that devolve upon us near the close of the year. I need not say that it is very natural for people to defer preparation for this meeting until a month or so before the meeting and then there is that great accumulation of duties. We have our commencement time coming on, and our trustees' meetings, and we are arranging our budget, and everything of that kind—all of those vital details that must be attended to with such scrupulous care and exactness and that will of course absorb our time and push aside that belated preparation for the meeting.

I may add a third consideration, which just occurs to me. I think, Mr. President, that we are all struck with the very great excellence last year, as we have been before, of the exercises, papers, and discussions at the meeting of the Department of Superintendence. The St. Louis meeting was certainly a great meeting, as there have been great meetings before. That means that it comes somewhere near the midyear period of comparative liberty from the great stress of our duties that we can devote to the preparation for the meeting; and altho I am not prepared to say positively, of course, that such will be the result, I believe that the programs of the Council, the exercises of the Council meeting, will be greatly improved by the change in time. That is a matter that will have to be demonstrated by actual experience but I am at least in favor; on my own part, I will go anywhere at any time that seems best, and at least indicate by my presence that I am in sympathy with it, tho I may not have had the opportunity to prepare work. Still I believe that the value of the Council will be materially increased by this change of time. I cannot think that the holding of the meeting of the Council at a different time would in any way threaten the life or vitality or perpetuity of the Association.

Director Bicknell: I wish William Torrey Harris were here. His idea was that the National Council stood as a highly trained body of experts which would lend their

influence and the influence of their discussion to the main Association. That was the main purpose of the formation of the Council. It was supposed to be part and parcel of the annual meeting and was held just in advance of it, not held concurrently. I remember the second meeting we held at Atlanta and it was a very successful meeting, and it seems to me that we cannot divorce the two without weakening both. I feel that way; I must vote that way.

Calls of "Question!"

DIRECTOR YOUNG: Excuse my speaking again. The point that I raised was not with regard to the Council meeting elsewhere from the place at which the National Association meets, but that the Council seemed to meet whenever it pleased. Its annual meeting was uncertain, and I feared that some time the secretary might fail to put in the word "annual" and I should not be there to vote at the annual meeting. I have thought further, since the discussion has been going on, of the great loss to the teachers of this country that will come from the separation of the Council from the general meetings. The argument which I brought to bear on the teachers of Chicago, and which increased very largely our Association membership, was due to my going back in my own experience to the early meeting of the Council. In all my educational career I have never attended anything else that equaled those early meetings and their influence upon my educational thought, and I urged upon the teachers to be here and hear the discussions of the leading men and women of the country. But alas! if the leading men and women of the country are busy teaching in the normal summer schools and college summer schools, then those teachers have stayed here to see only us, which I think, is a great misfortune. We have to bear in mind, after all is said and done, that the great aim, as I see it (I may be mistaken), of this Association is the uplifting of the teaching corps of the country. It is a pity that this winter the leading people connected with colleges and normal schools and superintendencies gave their papers at St. Louis, and the teachers were not there. The teachers will be here this summer. I have been thinking, since I have sat here, that for many years I have realized what Mr. Kirk said, that there is a great danger threatening us from the summer schools, and I have been wondering why it would not be possible to organize a movement which would lead all boards of education thruout the country to give two weeks in September or October, to close the schools, paying the salaries, and letting the teachers attend this Association, and then all of the teachers that wish to could attend the summer schools, and all of the members of schools who wish to recoup their pocketbooks by teaching in the summer schools could do so, and it would have no effect upon the National Association meeting.

DIRECTOR SCRIBNER: I move that the part of Article III as read by the Secretary be cut at the first sentence, and that the clause "or at such other time and place as the Executive Committee of the Council may designate," be stricken out.

DIRECTOR BICKNELL: I should like to see that vote put thru if that is to be a regular meeting. I think the annual meeting should be held in connection with this body.

PRESIDENT PEARSE: If the director thinks another amendment is needed, I suggest that he make it.

DIRECTOR T. D. BOYD, of Louisiana: I should like to ask for information. Several amendments have been read. I am not sure that we understand the question exactly. The constitution now requires the Council to meet during this meeting, and yet it held a meeting during the convention and also at St. Louis.

DIRECTOR ALEY: The annual meeting has just been held. A special meeting was held at St. Louis.

DIRECTOR BOYD: Why not let the amendment provide for two regular annual meetings, one to be held at this time and in connection with the general convention, the other to be held at the Superintendence convention, and then special meetings whenever the Council desires? As I understand the thing, the meeting of the Department of Superintendence is getting to be just as great an affair as this convention, and it strikes

me that the trend of events is leading to the holding, perhaps, of this convention in the winter time to take the place of the Department of Superintendence; and it seems to me that it would not be a very violent change in the constitution to direct the Council to hold two regular annual meetings, one at the regular convention in the summer and the other at the meeting of the Department of Superintendence in the winter.

PRESIDENT PEARSE: Is there any further discussion of the matter?

DIRECTOR T. A. MOTT, of Indiana: May I ask for information? Have we the right to change that constitution, or simply to approve or disapprove? Could we change the constitution of the Council?

PRESIDENT PEARSE: Do you ask that of the Chair as a matter of ruling? I should say that this body can only approve or disapprove.

DIRECTOR ALEY: That is correct.

DIRECTOR MOTT: If we don't quite approve of that amendment, we should refer it back to the Council. Personally I am very much in favor of meeting both times, with the superintendents and here with this meeting, because there were large numbers of the Council present both times, and each time is an opportune time to have a good meeting.

DIRECTOR SCRIBNER: It seems to me, Mr. President, that some of the speakers fail to understand that the Council is a co-ordinate branch of the National Education Association, and it has not been the purpose of those who have had the matter of amending the constitution in hand in any way to deprecate this meeting, and there is nothing to prevent the Council having a regular session at the annual meeting of the National Education Association as well as with the Department of Superintendence.

PRESIDENT PEARSE: If we do not approve the constitution proposed by the Council, if we feel it needs some further putting into shape, it will be proper for us to return it to the Council for their further consideration.

DIRECTOR BICKNELL: I move that we do refer it back.

PRESIDENT PEARSE: Director Greenwood has the floor.

DIRECTOR J. M. GREENWOOD, of Missouri: The Council has for many years been composed of many of the persons here present, and under the former arrangement—generally meeting on Friday before the Association commenced the next Monday—many of us had to leave our work and come two or three days in advance of the meeting of the National Education Association. I should judge there would be plenty of opportunity for the usual meeting with the Department of Superintendence having a regular program with discussions and reports at times that would not conflict materially with the Department of Superintendence. The second thought was, then, to hold a short meeting of the Council, just as was done at this session last Saturday, and finish up what business was necessarily left to be transacted. Now, as a matter of fact, you know that very few persons, except some that are interested, ever attended the meetings of the Council. Last Saturday I think I could have counted fifty persons present. Then again, the members of the Council, many of them, are on different programs of the meetings which interfere with the other department meetings of the Association. As I understand it, there is no intention to cut off from the general Association, but that we might be more efficient in our work and give the members of the Council opportunity to attend the department meetings and the general sessions of the Association. I have been in the Council when there would not be fifteen persons present, and the last meeting, in which important matters were transacted, there was hardly a quorum to finish the unfinished business. This was the reason.

DIRECTOR COOK: I desire instruction. As I understand the motion, it was offered to release the Council of certain embarrassment arising from the fact that it did not observe technicalities. In the first place, is it possible for this Board of Directors to relieve the Council from the embarrassment which it now feels because of its neglect of that technicality of giving notice? Then I wish to ask further whether that would be a genuinely regular enactment if we should by a vote endeavor to relieve the Council from that embarrassment.

PRESIDENT PEARSE: The secretary of the Council will answer as his judgment and information direct.

DIRECTOR ALEY: Just as soon as the officers of the Council discovered that the matter of bringing this before this body at San Francisco had been overlooked, it was immediately decided to work under the old constitution or by-laws of the Council: that is, that the meeting at St. Louis should be a special meeting. The regular meeting of the Council, at which all business was transacted, occurred Saturday here, which was a regular meeting under the old constitution, so that there is no particular embarrassment to be relieved. The Council now asks that the changes made in their by-laws a year ago become effective for future action by the approval of this board.

DIRECTOR BICKNELL: The Council is not a co-ordinate body. I do not so understand it. It is a subordinate body, formed at Chautauqua, N.Y., in 1880, by the National Association, because the constitution and by-laws were approved by this body. It was the child of the National Association and belongs to it as its child, and has full control of that constitution and general management, so far as that goes. It seems to me that it would be worse than useless to have a nominal meeting in connection with this meeting. I have been present at a meeting of the National Education Association where there were not over fifteen or twenty present. That is true of the National Association. The National Council was its first movement forward, its first great movement forward. It was a magnificent movement, and around it and with it in the Association, as it belongs today, the Association will reach higher and greater things. It seems to me, if it be divorced and simply a nominal meeting held here it will be unfortunate. We ought to stand by our original plan and make the Council a part of this plan.

DIRECTOR ALEY: I may say that the meeting on Saturday was not a nominal meeting. It was a regular meeting with three sessions with splendid programs. I think everybody there will testify that as good programs were presented on Saturday as have been presented at any meeting, and there were more people at each of those meetings than were in attendance at San Francisco one year ago.

DIRECTOR LUCKEY: I should like to ask whether the purpose of the Council is not for the good of the people and for the help of the teaching corps of the country. I attended the meeting at San Francisco and I do not believe that we had at any one time two hundred members as an audience. At St. Louis I attended the meeting also and a great many of our teachers went there from my state and I am sure that the audiences would average twelve hundred. If we can give this information that we have to twelve hundred people at one time, rather than two hundred, it seems to me it is wise to make such a change.

PRESIDENT PEARSE: The Chair desires to call attention to the fact that we have a proposition before us to approve the constitution and by-laws presented by the Educational Council. We can approve or disapprove them or we can re-refer them.

DIRECTOR SCRIBNER: The motion is to approve. Question.

The motion was put and carried.

PRESIDENT PEARSE: The next business is the report of the Board of Trustees.

CHAIRMAN GREENWOOD: The report of the Board of Trustees, I think, has been distributed to all the directors. Probably most of you have read the report. It is brief, and I think all the principal facts in connection with the financial interests committed to the Board of Trustees are stated. As you will observe, there was an investment made in school bonds, $10,000 in Kansas City, Mo., school bonds. They were purchased at 95 cents on the dollar. These bonds fall due in 1925 and interest is payable semiannually. Probably I should make a personal statement here. For the purchase of the school bonds $10,000 had been set aside, transferred to the Permanent Fund; $9,500 of that was used for the purpose of purchasing these bonds, which purchase was concurred in by all the members of the Board of Trustees. The interest falls due July 1 and January 1. The $500 not used was transferred to a balance on hand of nearly $3,000 carried over from last year, making an unexpended fund now of about $3,300 or $3,400 to be invested in securities.

It is not worth while, unless you have some questions, to take further time in regard to this report. It is properly certified to by the examiner of securities. If there are any questions I should be very glad to answer so far as I can.

PRESIDENT PEARSE: Are there further questions? If not, the question is on the adoption of the report and placing it on file. If there is no objection, the report will be received and placed on file. The next order of business is the report of the Treasurer.

TREASURER BLAKE: It is not necessary for me to read this report, as it is in the hands of every director. I will spare you the statistics and will read only the suggestions that I have made.

I therefore recommend that the membership certificates in future be entirely in the hands of the Treasurer, that the Secretary acknowledge the payment of dues on a printed form stating that the Treasurer will send membership certificate later. This would give the Association a second roll of active members, and as the Treasurer's roll would be kept in a different place from that of the Secretary, it would remove the present danger of having the records completely destroyed in case of fire.

I recommend further that the bond for the Treasurer be reduced to a minimum. The Treasurer at present has no checkbook, and cannot draw on the funds of the Association. The $10,000 bond now issued is therefore unnecessarily expensive.

Lastly, I recommend that the present regulation limiting funds at the disposal of the state directors to $20 each be amended so as to allow the state director to draw on the Association for actual expenses incurred to an amount not to exceed 25 per cent of the annual dues of the active members in the state for the year of his administration. I make this recommendation on the advice of several successful business men as being in line with modern business methods. Such a policy would doubtless largely increase the membership and the income of the Association. That the present arrangement is unfair will be borne out by the following statistics of the San Francisco convention.

Of course this body can only recommend that, it cannot make any By-Laws or anything of that kind, but I suppose that you could adopt a regulation or recommend that the Trustees adopt such a regulation, the Board of Trustees having the power to make rules for the Secretary and Treasurer.

I do not know what body made the regulation that the annual allowance to state directors should be $20 apiece. I believe it was the Board of Trustees.

PRESIDENT PEARSE: Probably the Board of Trustees or the Executive Committee.

TREASURER BLAKE: Then that recommendation, if this body sees fit to approve it, could go to the Executive Committee for action. It is embarrassing to have members say, as has happened since the convention, "Where are the (naming a state) headquarters?" I think there are no California headquarters, and yet California this past year has had an enormous active membership. It does not seem to me that after entertaining us as royally as California did last summer the state director of that state should be allowed only $20 to pay for headquarters and so on. I am free to make this recommendation as I am not a state director.

DIRECTOR COOK: May I ask if the speaker is aware of the fact that the state teachers' associations in most of the states—in many of the states—make quite an ample appropriation for headquarters?

TREASURER BLAKE: You say "in most of the states," and then "in many of the states." I think "many of the states" is more accurate than "most of the states." I know in New York state that there was an appropriation under Mr. Downing's directorship. When Mr. Downing ceased to be state director the state of New York took no further interest in headquarters for the state of New York.

A DIRECTOR: Is it not true that the state directors have no right to use that money for anything excepting postage and stationery? They cannot use it for headquarters?

PRESIDENT PEARSE: That is correct.

TREASURER BLAKE: That may all be. I am not finding any fault with the way the money is spent. Anybody that spends only $20 can get but a small attendance from his state. I am saying that the state directors ought to be in a position to be able to

arouse interest by paying for headquarters and maintaining their states in proper standing. That is merely my recommendation.

The balance in the treasury is now over $5,000, and we have turned over to the general fund this year $10,000.

PRESIDENT PEARSE: As it seems to the Chairman, the recommendations fall under three heads: first, with reference to change in the duties and perhaps the title of the Secretary and Treasurer, which I suppose would be referred to the active members of the Association. The recommendation that the Treasurer's bond be reduced should go to the Trustees, and the recommendation with reference to the regulation limiting the funds at the disposal of the state directors might properly be considered by the new Board of Directors and the Executive Committee which will work during the next year. If such reference is satisfactory to the directors, it will be made. If other action is desired, what is your pleasure?

TREASURER BLAKE: It seems to me that the first recommendation should go to the Board of Trustees rather than to the active members. They have the ordering of the financial affairs of the Association.

PRESIDENT PEARSE: There is one other recommendation. It is for an arrangement for the issuing of the membership certificates by the Treasurer. Is there objection to the reference, or will you make some other suggestions if this is not satisfactory?

DIRECTOR A. R. TAYLOR, of Illinois: I move the reference to the different organizations which the Chairman has suggested.

The motion was seconded and carried.

PRESIDENT PEARSE: The report of the Treasurer, having been received with the proper certificates, is approved and placed on file unless objection is made.

PRESIDENT PEARSE: Reports of other officers. Has the Secretary anything to offer? The President has something to offer which he will present at this time:

Report of the President to the Board of Directors of the National Education Association:

It has not, in the past, been the custom for the President to submit a report at this time, tho the Board of Trustees and the Treasurer do so. There is, however, a good deal of business transacted thru the year by the Executive Committee, or by the President for them, on behalf of the Association, and there seem to be good reasons why the President, as the chief executive officer of the Association, should report such items as, in his judgment, ought to come to the directors in this way, with such comment as to him seems proper. The accompanying report is submitted in accordance with this view.

REPRESENTATIVES ACCREDITED TO NOTABLE EDUCATIONAL GATHERINGS AND FUNCTIONS

Invitations were received during the year from various educational institutions, and organizations of an educational or semi-educational character, requesting that the National Education Association be represented on important occasions by its principal officers or by delegates. In accordance with such invitations, the Association was represented as follows:

At the Third National Conservation Congress, Kansas City, Mo., September 25, 26, 27, 1911, by Hon. George B. Cook, state superintendent of public schools, Little Rock, Ark.; Professor E. C. Bishop, State College of Agriculture, Ames, Iowa; Hon. E. T. Fairchild, state superintendent of public instruction, Topeka, Kans.; Superintendent James M. Greenwood, Kansas City, Mo.; Professor J. L. McBrien, Extension Division, State University, Lincoln, Nebr.

The following resolutions were presented by your delegates to the Conservation Congress and were unanimously adopted by that body:

Resolved, That the children of the United States are recognized as the most precious resource of this nation, and that the federal Bureau of Education is the only agency for collecting, publishing, and distributing educational information thruout the country. We, therefore, urge that the national appropriations for studying problems involving the welfare of the nation's school children be made comparable in amount with those annually made for studying problems involving the welfare and conservation of the nation's material resources.

Resolved, That in a system of free schools all the children should be trained for good citizenship and for the useful industries; that owing to the rapidly changing and increasingly complex social and economic conditions now found in all sections of the Union, our public schools should make ample provision for instructing the youth of the land in the more important occupations in which our people are engaged, and parents and teachers should counsel together to determine, if possible, what vocation each child is best adapted to pursue.

Resolved, That the Vocational Education Bill now pending in Congress, providing for the training of teachers to give scientific instruction in the elements of agriculture in the rural schools, has our hearty indorsement, and we urge its speedy enactment.

At the inauguration of George E. Vincent, LL.D., as president of the University of Minnesota, Minneapolis, October 19, by the President of the Association.

At the inauguration of Ellen Fitz Pendleton, Litt.D., as president of Wellesley College, on October 19, 1911, by President Ellen M. Sabin, of Milwaukee-Downer College, Milwaukee, Wis.

At the celebration of the One Hundred Twenty-fifth Anniversary of the founding of the University of Pittsburgh, Pennsylvania, on February 27, 28, 29, 1912, by President William O. Thompson, of the State University, Columbus, Ohio.

At the inauguration of Anna Jane McKeag, Ph.D., as president of Wilson College, Chambersburg, Pa., on May 1, 1912, by Grace F. Pennypacker, vice-president of the Home and School League, Philadelphia, Pa.

At the meeting of the American Library Association at Ottawa, Canada, June 27 to July 2, by President George E. Vincent, of the University of Minnesota, Minneapolis.

DETERMINATION OF THE PLACE OF MEETING

At San Francisco, the directors present, on the showing made to them previously and at the time of their meeting, indicated their preference for St. Paul as the next place of meeting for the Association by a vote of thirty-one for that city to ten for Chicago. The matter was then, in accordance with custom, referred to the Executive Committee, with power to act, and to decide upon such location as in their judgment would best serve the interests of the Association. The Executive Committee, assuming that the necessary and customary conditions would be met at St. Paul, as the directors had been assured would be the case, visited St. Paul, inspected the facilities and conveniences offered, and decided to hold the meeting for 1912 in that city, provided the conditions which had been promised were met. St. Paul, however, at once began to experience difficulty in fulfilling these conditions. The railways refused to announce the customary rates, tho the St. Paul committee explained that they had private assurances that the rates would soon be authorized. To assist the St. Paul committee, members of the Executive Committee and the Secretary made repeated visits to Chicago and to St. Paul to confer with various railway authorities and if possible secure the announcement or assurances of the expected rates for St. Paul. All these efforts were futile, however, and by the time of the meeting of the Department of Superintendence at St. Louis in February, the Executive Committee, having definite assurance that no rates such as had been customary for the National Education Association could be expected in Western and Central Passenger Association territory, notified the St. Paul committee that they considered the question of location for the meeting an open one, subject to such determination as the interests of the Association might require.

When the failure to get rates had become practically certain, the President sent to all the directors representing the various states and territories a letter stating the facts as they had developed, and asking for their unofficial expression of opinion. Replies were received from thirty-two of the forty-eight State Directors (not counting Porto Rico, Hawaii, and the Philippines) by the time when it became necessary for the Executive Committee to make a decision. Of these replies thirteen, including that of the director from Illinois, favored St. Paul; eleven expressed a preference for Chicago; eight stated that as between Chicago and St. Paul they had no choice and thought the Executive Committee, which had fuller information than any single director, should decide as the members thought best. Sixteen directors had made no reply. It is probably fair to assume that these sixteen shared the sentiment of the eight who thought the decision should be made by the Executive Committee.

The committee considered the situation carefully; they investigated conditions in Chicago and ascertained the facilities offered there. The Chicago proffer had received little consideration up to that time, the committee having given its attention chiefly to St. Paul, assuming that conditions would finally be met, and the meeting held in that city.

After thus weighing the matter, a majority of the members of the committee decided that it would be wiser to hold the meeting for 1912 in Chicago; and the Association is now assembling in this city.

The local facilities offered the Association in Chicago were equal, at least, to those offered elsewhere; Chicago is less convenient for only a small proportion of the membership, most directly tributary to St. Paul; a meeting in St. Paul would have required three-fourths of the members to pass thru Chicago, the extra journey from Chicago to St. Paul and return, at the rates prevailing for railway and sleeping-car fare, requiring an extra outlay of about $20 for each of these members. Under the new and trying conditions to be met this year, your committee felt that a central location, as near as possible to the great body of the membership, was highly important.

The Executive Committee was subjected to some severe strictures from persons not familiar with all the facts. It was even stated that never before had an Executive Committee set up its own judgment in such a manner. Persons making such statements should have read history. By so doing they might have found that in 1892 the Executive Committee located the meeting of the Association in Saratoga Springs, N.Y., altho the previous year the directors had expressed a strong preference for Helena, Mont., as the place of meeting.

In 1894 the meeting was held at Asbury Park, altho at the last preceding meeting, in 1892, Asbury Park was not considered, but invitations were received from Milwaukee, Seattle, and Salt Lake City.

In 1896 the Executive Committee located the meeting in Buffalo, altho at the previous meeting in Denver, Los Angeles had been the city indicated as first choice by the directors.

In 1898 the Executive Committee located the meeting in Washington, D.C., altho at the preceding meeting the directors had expressed their preference for Omaha.

In 1907 the Executive Committee after extended negotiations with Philadelphia, located the meeting at Los Angeles, altho at the preceding meeting in 1905, Portland, Ore., Denver, and Salt Lake City, as well as San Francisco, had been among the places anxious to entertain the convention.

In 1910 the Executive Committee located the meeting in Boston, altho at the preceding meeting in Denver the directors had expressed their preference for San Francisco, voting twenty-one for San Francisco, ten for Milwaukee, and four for Boston.

EXAMINATION OF THE FINANCIAL RECORDS OF THE ASSOCIATION

Something over a year ago some newspaper reports concerning the possible condition of National Education Association funds or concerning a lack of knowledge of the condition of those funds, caused some little comment among those interested in Association affairs. No great notice was taken of these and no particular importance attached to them, however, by most of the people who saw them, and probably the matter would very soon have been forgotten had not an official of the Association taken pains to have facsimiles of some of these articles prepared and distributed widely thruout the country. This action was followed by considerable more discussion, and further comment from an increased number of persons. It was suggested that the Trustees at that time cause an examination of the securities and other financial records of the Association to be made, but nothing of the sort was done.

At the San Francisco meeting of the Board of Directors for the year 1910–11, the Treasurer serving for that year presented an elaborate report of some investigations which he had made, as he explained to the directors, for the purpose of satisfying his own curiosity. Unfortunately, this report was not made as the result of any authorization by officials of the Association and was not complete, since it did not include an examination of vouchers or a comparison of the same with the records. It was merely a carefully prepared document containing much interesting information gathered from various records of the Association; it was not in any way conclusive or final. It did, however, serve to raise the entire question of the records and funds of the Association anew and to indicate that, in the minds of some persons, at least, some inquiry or investigation was advisable.

During the autumn of 1911, after the meeting in San Francisco, the chairman of the Board of Trustees and one other member of that board, by arrangement between themselves, visited the vaults in which the securities representing the Permanent Fund of the Association are kept, and were accorded the privilege of examining those securities. They afterward published a statement saying that "in accordance with arrangement" they had examined the securities and found them to be as represented. It is unfortunate

that this examination also was made without notice to the other members of the Board of Trustees and without their knowledge, and that, altho the form of the statement made, no doubt, led many who read it to understand that the "arrangement" referred to was made by the Board of Trustees, the examination was not in anywise official or one which could be recognized by the Board of Trustees. Under these circumstances it seemed, both to members of the Board of Trustees and to members of the Executive Committee, that a complete examination of the records and accounts, vouchers, and other papers of the Association should be made, in order that any uncertainty which might exist in the minds of any of the members of the Association or in the minds of any other persons, might be set at rest, and any further talk or speculation concerning the same might be rendered unnecessary.

In accordance with this view, the President of the Association was authorized by the Board of Trustees to cause to be made such an examination of the accounts and papers of the Trustees, and by the Executive Committee to have such an examination made of the books of account and papers relating to the current funds of the Association since July, 1903, as might be thought advisable. In accordance with this authorization the President employed Marwick, Mitchell, Peat & Co., chartered accountants having offices in Chicago, Milwaukee, Minneapolis, and a number of the leading financial centers of the United States, also offices in various cities in Great Britain.

After the accountants, in accordance with authorization, had been employed to do this work and were preparing to begin the examination, letters were received from some of the officials concerned, either protesting against the examination or raising technical points with reference to it. These objections and technical matters were not thought of sufficient weight, however, to warrant abandoning or delaying the examination and the accountants began their work about the 20th of June. The President has received their report, which is transmitted to the Board of Directors herewith.

It gives the President pleasure to be able to inform the directors that the accountants report the accounts correct and state that in their judgment all receipts have been duly accounted for.

In accordance with the provisions of the Articles of Incorporation and By-Laws, the President, with the advice and consent of the Treasurer and the Secretary, designated Marwick, Mitchell, Peat & Co. to be the examiners of the securities constituting the Permanent Fund. They made the examination as requested and their certificate shows also that the funds reported by the custodian, in whose hands the funds have been for some years, are intact and in his possession.

The President desires, however, to call attention to two or three matters which seem to him to deserve attention. The accountants, in their report, recommend that some different method of handling and issuing the membership certificates and the funds received from memberships be devised. They suggest that the membership certificates be printed and supplied to the Secretary either by the Board of Trustees or by the Treasurer.

The Secretary, in accordance with the present custom, acts as collector both of memberships and of other funds of the Association. He himself has the membership certificates printed, he collects the money paid for memberships, and issues the membership certificates therefor. He accounts to the Treasurer for funds collected, as shown by the stubs in the membership receipt books. There is no suggestion that all membership books printed and used have not been accounted for; and yet had a dishonest official acted as collector in this manner during the years while the custom has prevailed, and, under the administration of such an officer a hundred or five hundred or a thousand of the stubs showing associate membership fees collected had been "lost," there would have been no way of knowing that this had been done. No one makes, or has any thought of making, any charge that any funds collected by the Secretary have failed to reach the coffers of the Association; if any such charge were made it would be impossible to substantiate it. On the other hand, under the system which has long been in vogue, it would be equally impossible for the official who has acted as collector in this way to show absolutely that no such thing had taken place or could take place. It is a matter of surprise that so serious a flaw as this should have been so long allowed to exist in the method by which the officials of the Association collect and account for the funds which pass thru their hands. I wish to emphasize the suggestion of the accountants, which is also the suggestion of the Treasurer, that the blank forms for use in the collection of membership fees and the issuance of membership certificates be printed under the direction of the Treasurer or under the direction of the Board of Trustees and that the same be issued to the Secretary for his use as collector for the Association. This suggestion is more in the interest of the Secretary, who is the collector for the Association, than in the interest of the Association, which appears to have been well and honestly served. In the words

of the accountants who have examined and reported upon the financial records of the Association, "By this means the Secretary would be relieved of responsibility upon being called upon to account for missing certificate books."

The President wishes also to suggest that somewhat more care be required in itemizing and auditing bills for expenses incurred on behalf of the Association. Many thousands of dollars are paid out of the Association's funds every year for the expenses incurred by various persons in doing the business of the Association. The expense accounts of some of these are rendered in minute detail accompanied by vouchers in all cases where possible. Other bills are presented very loosely itemized and in some cases entirely unaccompanied by any vouchers. Most institutions transacting business in anything like the volume transacted by the National Education Association require much greater care in the preparation and rendering of expense accounts. In certain matters the Association exercises great care. It has most minute directions for the correction of proof and a most carefully prepared "style sheet" is sent out to all those who read proof of matter which is to appear in the volume of *Proceedings*. If some sheet of instructions prepared with similar care could be supplied to persons who are authorized to incur expenses on behalf of the Association, it would be of advantage both to those who render bills, and to the Association. The form used in rendering bills to the Secretary is carefully prepared and itemized upon the outside as to the accounts into which the items of expense included in the bill shall fall. If a form prepared with equal care could be used on the inside to facilitate the proper itemization of accounts, the plan would commend itself.

During the year the President has made it a practice to file with his receipted bills for telegrams copies of the telegrams for which the Association is asked to pay. He has also asked the Secretary, as the other officer of the Association incurring the greatest expense for telegrams, to follow the same plan, and, since early in the autumn when the request was first made, the Secretary has cheerfully complied with the request. The national government requires that telegrams included in expense bills shall be thus furnished in duplicate. Many large corporations and business institutions follow the same plan. There seems no reason why the National Education Association should not adopt this method. An instance of the advisability of following this plan developed only recently: when the Secretary, in attempting to complete the file of copies of telegrams, sought to supply copies of some messages sent early in the year, he found himself unable to do so, either from his own files or from the files of the telegraph company, it proving impracticable to get, on request, the copies of telegrams amounting to several dollars, sent earlier in the year. Some of these telegrams were of such importance that the cost of transmission mounted into the dollars. Any method of records and accounting which does not retain copies of important messages of this character is less accurate and careful than it should be.

Respectfully submitted,
CARROLL G. PEARSE
President, National Education Association

CHICAGO, ILL.
July 8, 1912

MARWICK, MITCHELL, PEAT & Co.
CHARTERED ACCOUNTANTS
Partners
Marwick, Mitchell & Co. W. B. Peat & Co.
115 South La Salle St.
Chicago, Ill., July 6, 1912

Carroll G. Pearse, Esq., President
National Education Association of the United States
Milwaukee, Wisconsin

DEAR SIR: In accordance with your instructions, we have made an examination of the books and records of the above Association for the period from July 1, 1903, to June 30, 1912, and now submit our report thereon, together with the following statements:

Exhibits

"A," receipts and disbursements for the nine years ended June 30, 1912.

"B," securities held for the Permanent Fund as at June 30, 1912.

Schedules for the nine years ended June 30, 1912

"1," revenue from Permanent Fund received by Board of Trustees and transferred to Treasurer.

"2," analysis of disbursements.

RECEIPTS AND DISBURSEMENTS

The receipts and disbursements for the nine years ended June 30, 1912, are detailed by years in Exhibit "A" supplemented by Schedules "1" and "2." A summary of the transactions of the Association during this period may be shown as follows:

Cash on hand July 1, 1903	$ 346.36
Receipts, July 1, 1903 to June 30, 1912	389,059.22
	$389,405.58
Disbursements July 1, 1903 to June 30, 1912	$299,872.85
	$ 89,532.73
Transfers to Permanent Fund	$ 84,150.00
Cash on hand June 30, 1912	$ 5,382.73

We conducted an exhaustive investigation of the receipts and are of opinion that all revenue has been properly recorded. Vouchers for disbursements were produced for our inspection and were in every case properly signed, approved, and authorized. We would point out that in accordance with the customary practice of the officials of the Association, the receipts each year, as recorded in Exhibit "A," include receipts to June 15 only, cash received during the period from June 15 to June 30 being carried forward to the next financial year. This practice was introduced to enable the report of the transactions for the year to be presented to the annual convention held early in July.

In connection with our audit of the accounts for the year ended June 30, 1912, we devoted special attention to the receipts from the San Francisco convention in July, 1911, and from the St. Louis meeting of the Department of Superintendence in February, 1912, and in our opinion all receipts were properly accounted for.

We suggest for your consideration the practicability of placing the issuance of certificate books in the hands of the Board of Trustees or the Treasurer and holding the Secretary responsible for all unused books. By this means the Secretary would be relieved of responsibility upon being called upon to account for missing certificate books. At the present time the Secretary orders such certificate books as are required, and unused books are not accounted for.

The books of the Association were well and carefully kept during the period covered by our investigation.

A statement of the permanent fund of the Association as at June 30, 1912, amounting to $190,000.00 is presented in Exhibit "B" which may be summarized as follows:

Security	Par Value	Book Value
Municipal and school bonds	$ 98,000.00	$ 98,940.00
Railroad bonds	86,000.00	82,162.50
Real estate		5,500.00
Cash on hand for investment		3,397.50
	$184,000.00	$190,000.00

The securities comprising the Permanent Fund as at June 30, 1912, deposited in the custody of the First Trust and Savings Bank were produced for our inspection and found to be in order.

The revenue from investments for the period from July 1, 1903, to June 30, 1912, was carefully checked with the Trustees' accounts and was found to be in agreement with the amount received by the Treasurer. A schedule of the interest received on investments is submitted in Schedule "1" and calls for no special comment.

In conclusion we desire to express our appreciation of the courtesies extended to our representatives while engaged on this examination.

Yours truly,

(*Signed*) Marwick, Mitchell, Peat & Co.
Chartered Accountants

DIRECTOR TAYLOR: There are some very important suggestions in your report, and I move that they be referred to the proper boards and committees, if you will designate them as you designated the recommendations in the report of the Treasurer.

PRESIDENT PEARSE: If the board wishes that they be referred by me, I will do so.

DIRECTOR COOK: Please state the motion.

PRESIDENT PEARSE: That the various items in the report made by the President be referred to the Executive Committee or the Trustees or to the incoming Board of Directors, as may be proper.

DIRECTOR SCRIBNER: I would amend Mr. Taylor's motion, that the report be referred to the Board of Trustees.

DIRECTOR TAYLOR: It is simply a question of proper reference with me. If that amendment would carry all of those recommendations to the proper place, I would be glad to accept it.

PRESIDENT PEARSE: The Chair has not had in mind to what authorities the recommendations of the report should go. There is no objection to having them go where the directors desire.

At this point there followed an extended discussion without definite action which continued until adjournment. This discussion is omitted from the record of the meeting in accordance with a motion adopted at the adjourned meeting of the Board of Directors, as follows:

Resolved, That all matter appertaining to the questions raised yesterday by the President in that section of his report entitled "Permanent Membership," and replied to by the Secretary today, and the following discussion—meaning all such matter now in print, in typewriting, or in stenographer's notes—be expunged from the records without impugning the motives or impeaching the character of any officer or member of the National Education Association—this resolution alone being published regarding the matter.

The meeting then adjourned to meet at 2:30 P.M., Tuesday, July 9.

IRWIN SHEPARD, *Secretary*

Approved,

CARROLL G. PEARSE, *President*

MINUTES OF ADJOURNED MEETING OF THE BOARD OF DIRECTORS

CHICAGO, ILL., TUESDAY, JULY 9, 1912

The meeting was called to order about 3:00 P.M. by President Carroll G. Pearse.

The roll-call was taken, resulting as follows:

Present: Directors Carroll G. Pearse, of Wisconsin; Katherine D. Blake, of New York; Irwin Shepard, of Minnesota; Thomas W. Bicknell, of Rhode Island; John W. Cook, of Illinois; Edwin G. Cooley, of Illinois; Oscar T. Corson, of Ohio; James M. Greenwood, of Missouri; Lorenzo D. Harvey, of Wisconsin; James Y. Joyner, of North Carolina; Charles I. Parker, of Illinois; Nathan C. Schaeffer, of Pennsylvania; A. R. Taylor, of Illinois; Ella Flagg Young, of Illinois; John H. Phillips, of Alabama; A. J. Matthews, of Arizona; George B. Cook, of Arkansas; James Ferguson, of California; James B. Ragan, of Colorado; Clem Hampton, of Florida; Grace M. Shepherd, of Idaho; William H. Campbell, of Illinois; Thomas A. Mott, of Indiana; O. P. Bostwick, of Iowa; John MacDonald, of Kansas; Robert J. Aley, of Maine; B. K. Purdum, of Maryland; Robert J. Fuller, of Massachusetts; E. E. Scribner, of Michigan; C. G. Schulz, of Minnesota; E. E. Bass, of Mississippi; John R. Kirk, of Missouri; Ward H. Nye, of Montana; G. W. A. Luckey, of Nebraska; W. J. Hunting, of Nevada; W. E. Garrison, of New Mexico; Grace C. Strachan, of New York; F. M. Harper, of North Carolina; George A. McFarland, of North Dakota; Edward M. Van Cleve, of Ohio; William F. Ramey, of Oklahoma; L. R. Alderman, of Oregon; Reed B. Teitrick, of Pennsylvania; D. B. Johnson, of South Carolina; J. J. Keyes, of Tennessee; George N. Child, of Utah; C. E. Beach, of Washington; Emma J. Gardner, of Wisconsin; Ira B. Fee, of Wyoming.

SECRETARY SHEPARD: Two of the states not represented yesterday, South Dakota and Connecticut, are represented today by letters of resignation from Director Ramer, of South Dakota, nominating Mr. C. G. Lawrence, who is present, and Mr. Verplanck, of Connecticut, who, as I reported yesterday, nominated Mr. Arthur D. Call, who did not reach here yesterday but who is present at this time.

PRESIDENT PEARSE: Directors, what is your pleasure? Shall the resignations of these two directors and the nominations be received and acted on at this time?

DIRECTOR E. E. SCRIBNER, of Michigan: I move that the resignations be received and the nominations approved.

The motion was duly seconded and carried.

C. G. Lawrence, of South Dakota, and Arthur D. Call, of Connecticut, reported as present and were duly seated. The total number of directors present was fifty-one.

PRESIDENT PEARSE: Is it your pleasure to take up and dispose of the matter which was under discussion at the time of adjournment, or shall the regular order of business, containing some three or four remaining items, be disposed of and then the other business taken up?

DIRECTOR J. M. GREENWOOD, of Missouri: I move that we take up the regular order of business not disposed of yesterday.

The motion was duly seconded and adopted.

DIRECTOR T. D. BICKNELL, of Rhode Island: I must leave before the meeting is over, and I wish to bring a matter before the Board of Directors. Two years ago at Boston a committee was appointed to organize an International Council of Education, and the committee has met today—a portion of the committee, made up of the ex-presidents of the Association and seven others. I would move that Mr. Carroll G. Pearse, the President of the Association, be made a member of this committee by reason of his holding the office of President of the Association.

PRESIDENT PEARSE: Will the director put his motion?

DIRECTOR BICKNELL: All those in favor of electing Mr. Carroll G. Pearse to membership in the Committee on International Council of Education will say Aye.

The motion was unanimously carried.

PRESIDENT PEARSE: The first order of business, as I understand the order, is the report of the Committee of the National Council on Investigations and Appropriations.

CHAIRMAN GREENWOOD: Mr. President, the Committee on Investigations and Appropriations, since adjournment in San Francisco, has had but one meeting and that was this forenoon and we are not prepared to bring in a report. We expect to report at the meeting of the new Board of Directors.

PRESIDENT PEARSE: You have heard the report that this committee has made. Is there any objection to allowing them additional time? If not, it is so allowed.

SECRETARY SHEPARD: We have a communication from Mr. Clark W. Hetherington, of the Athletic Research Society, asking that three representatives be appointed from each of five districts, the Eastern, Western, Southern, Rocky Mountain, and Pacific Coast districts, the three representatives preferably to be representatives of grammar schools, high schools, and normal schools, making in all fifteen men.

PRESIDENT PEARSE: The President, as well as the Secretary, has had communications with reference to the appointment of such a committee. It is desired on the part of the Athletic Research Society to have co-operative committees from educational organizations to study this question of athletics as related to education. It is desired that this Board of Directors authorize the appointment of a committee to consist of fifteen members to be chosen as indicated from different sections and representing different school interests, to co-operate in deliberative conferences with the other committees appointed by other organizations on request of the Athletic Research Society. What is your pleasure?

DIRECTOR E. E. BASS, of Mississippi: I move that the President be instructed to appoint such a committee.

PRESIDENT PEARSE: You have heard the motion that the President be instructed to appoint this committee.

DIRECTOR GREENWOOD: Does this involve an expenditure of money?

PRESIDENT PEARSE: Not unless later ordered by the directors. Are there further remarks?

The motion being duly seconded was put and carried.

SECRETARY SHEPARD: I have a communication from Dr. Thomas E. Storey, of the College of the City of New York, accompanied by a communication from the general secretary of the International Congress of Hygiene, to be held in this country. It is desired that there be an honorary vice-president appointed to sit in that convention as representative of the National Education Association. It is accompanied by a formal invitation and authorization for whomever shall be appointed.

PRESIDENT PEARSE: Directors, you have heard the request. What is your pleasure?

DIRECTOR GREENWOOD: I move that the President of the Association appoint an honorary member to sit in that body.

The motion was duly seconded and carried.

SECRETARY SHEPARD: I have a communication from W. S. McKinney, of Chicago, regarding expenses authorized at San Francisco. I think this communication comes under one of the divisions of the subjects referred to the Committee on Investigations and Appropriations.

PRESIDENT PEARSE: Lay it aside.

SECRETARY SHEPARD: I have a communication from President Joseph Swain, chairman of the Committee on Salaries authorized a year ago, with an appropriation of $3,000. The committee find it embarrassing to pay, as they deem it essential to pay, bills in advance of their payment by the Association, and they ask, if it is practicable, for a fund

of $200 or more to be available for the committee to draw upon as a revolving fund for current expenses, to be then rendered each month and covered by ordinary vouchers. It is the rule of the Association to pay bills but once each month, and the embarrassment has come from that monthly delay. It is an unusual request; it is not pressed. The committee simply ask for it, if it is practicable. If practicable, it would be very helpful to them.

PRESIDENT PEARSE: You have heard the request. What is your pleasure?

DIRECTOR J. W. COOK, of Illinois: I move that such an arrangement be made, under the control of the proper authority of the Association. Would that be the Committee of the National Council on Investigations and Appropriations, the Executive Committee, or the Board of Trustees?

PRESIDENT PEARSE: I presume it would be by the regular authorization of this body. Probably the proper motion would be for an appropriation of $200 or whatever sum is thought proper, to be made and placed in the hands of Chairman Swain of the committee, the voucher to be audited in the regular way and full details to be rendered by him in the form of itemized vouchers later.

DIRECTOR COOK: I will make that a part of my motion.

PRESIDENT PEARSE: Moved that the request of the committee be granted.

DIRECTOR GREENWOOD: Chairman Swain wished the directors to authorize this and asked the Committee on Investigations and Appropriations to make the recommendation. I hope it will be voted that such a sum, not to exceed $200, be authorized as a revolving fund, and that Chairman Swain's request go to the Committee on Appropriations with the indorsement of the directors.

PRESIDENT PEARSE: The money from which this appropriation would come has already been appropriated, both at the request of the general Association and by the Board of Directors at San Francisco. This is merely an authorization that a sum not to exceed $200 out of this money already appropriated by the Board of Directors be set aside for the use of President Swain and his committee. Would it be necessary for this to go thru the Committee on Investigations and Appropriations of the Council, which recommends that appropriations be made? It seems to the Chair that it would hardly be necessary. There is no objection to having it so referred, but it occurs to me that the appropriation having been already made, it will be sufficient for the Board of Directors to authorize the arrangement. You have heard the motion that the request be granted in terms as indicated. Are there any remarks?

The motion having been duly seconded was carried

SECRETARY SHEPARD: I have an application from Clarence D. Kingsley, of the Bureau of Education at Washington, D.C., for an additional appropriation of $1,200 for the expenses of the Committee on the Articulation of High School and College. I suspect that the same application has been made to the chairman of the Committee on Investigations and Appropriations of the Council.

PRESIDENT PEARSE: If there is no objection, this will be referred to the Committee on Investigations and Appropriations. It is so referred.

SECRETARY SHEPARD: I have a communication from the President of the Library Department requesting an appropriation to print a report that is now in preparation amounting to about twenty-five or thirty pages, supplementary to the report of Miss Baldwin, printed some years ago, upon "Courses of Instruction in Library Economy in Normal Schools." Much has been done and it is thought that they have a valuable report, but no funds are available to print it for circulation unless authorized by the Board of Directors.

PRESIDENT PEARSE: That should be referred to the Committee on Investigations and Appropriations the same as the last request.

SECRETARY SHEPARD: I have another communication from John Calvin Hanna, president of the Secondary Department, asking that the action of the Secondary Depart-

ment a year ago be approved by the Board of Directors. The Secondary Department confirmed the action of the individual round tables in calling themselves, or rather in adopting the name of, sections of the Secondary Department holding round tables. They want to be termed sections, not round tables, and Mr. Hanna says that he desires that the directors authorize the change in the name of these round tables to sections of the Department of Secondary Education.

PRESIDENT PEARSE: You have heard the request. What is your pleasure?

DIRECTOR SCRIBNER: I move that the request be granted.

The motion was seconded.

PRESIDENT PEARSE: It has been moved and seconded that the request of the Department of Secondary Education, that the subdivisions of that department be called hereafter sections instead of round tables, be granted.

DIRECTOP J. R. KIRK, of Missouri: I rise to a point of order, as to whether there is any constitutional provision for such action.

PRESIDENT PEARSE: The Chair will say that as far as he knows there is none. These members of the Department of Secondary Education may call their divisional meetings sections if they choose to do so. Am I correct about that?

DIRECTOR KIRK: That might cause confusion as to the use of the term sections and round tables.

PRESIDENT PEARSE: Of course there are no sections in this Association. This Association has general meetings and it has meetings of departments. There are no regularly organized sections. I don't know that it would make any difference except that the Department of Secondary Education, as it is explained to me, has a somewhat more regular custom of dividing for the discussion of topics in its curriculum.

The motion was duly carried.

SECRETARY SHEPARD: There is a very important question that I trust you will permit me to present now, with reference to the admission to the business meeting of active members in the Auditorium Theater tomorrow. Assuming that the ruling of last year stands, and that admission will be upon membership certificate, preparations to that end have been made, but it is quite essential that there be a committee on credentials. Some people leave their membership certificates at home, mislay them, or something of that kind, and we have found a committee on credentials very valuable and quite effective in preventing any friction or annoyance or delays. It is desirable that such a committee be appointed at the present time.

PRESIDENT PEARSE: The Chair rules that such a committee may be authorized at this time. If the directors should not think it worth while to authorize the appointment, I should appoint such a committee anyway, but I should be glad to be authorized.

DIRECTOR D. B. JOHNSON, of South Carolina: I move that the President be authorized to appoint such a committee, to consist of five members.

The motion was duly seconded and carried.

PRESIDENT PEARSE: The next item upon the Secretary's docket is unfinished business. Is it your wish to take up the unfinished business first, or the new business?

A DIRECTOR: I move that we take up the new business.

PRESIDENT PEARSE: If there is no objection, this will be done. What is the new business? Is there any new business?

SECRETARY SHEPARD: There is nothing docketed.

PRESIDENT PEARSE: Has any director any new business to present? If not, we come to the order of unfinished business. What is your pleasure?

DIRECTOR KIRK: I move that we proceed with the business in hand yesterday.

PRESIDENT PEARSE: Unless there is objection this will be done. In what manner will you proceed?

DIRECTOR W. J. HUNTING, of Nevada: I would like to ask what is the status of the business at the time of adjournment yesterday?

DIRECTOR J. Y. JOYNER, of North Carolina: We know what we adjourned for and I move we hear from it now. It was to give the Secretary time to present any report or statement he might wish to present in reply to the President. That is the unfinished business.

PRESIDENT PEARSE: The suggestion by Director Joyner is that the Secretary at this time be allowed to present any statement. If there is no objection, this will be the course of procedure.

At this point the Secretary presented a communication in answer to that part of the President's report presented the day before designated as "Permanent Membership."

After extended discussion, the following resolution was offered by Director Kirk, of Missouri, and carried:

Resolved, That all matter appertaining to the questions raised yesterday by the President in that section of his report entitled "Permanent Membership," and replied to by the Secretary today, and the following discussion—meaning all such matter now in print, in typewriting, or in stenographer's notes—be expunged from the records without impugning the motives or impeaching the character of any officer or member of the National Education Association—this resolution alone being published regarding the matter.

DIRECTOR R. B. TEITRICK, of Pennsylvania: I have a resolution which I would like to introduce before this body. In order that each state may foster a spirit of loyalty in bringing members to this Association, and that this may be apparent to those who have it in charge, I desire to offer the following resolution:

WHEREAS, Section eight (8) of the Act of Incorporation of the National Education Association of the United States provides that the meetings of the corporation may be held and that its business may be transacted as may be determined by the Board of Directors, therefore be it

Resolved, That in the annual meetings of the active members the members shall be seated by states, and whenever it shall be necessary to take a count, vote, or a vote by ballot, the vote shall be taken by each state director, or in his absence by a member appointed by the President, polling the members of his own state and announcing the result on a call of states.

PRESIDENT PEARSE: You have heard the resolution. The Chair would say that presented at this late hour it would embody some difficulties in the carrying-out of the plan for the present year. It might be referred to the active members for their approval.

DIRECTOR TEITRICK: I would like to ask Secretary Shepard if it is possible to carry it out this year.

SECRETARY SHEPARD: In two hours we arranged for twenty-four states to meet by states in the Auditorium Theater. There is now more time than that before the meeting of active members. It can be carried out. We can assign the places of states and we can furnish to every state director a list of members. We can carry it out if it is desirable.

DIRECTOR TEITRICK: I move its adoption for the present year.

PRESIDENT PEARSE: You have heard the motion and the second.

DIRECTOR JOHN MACDONALD, of Kansas: I don't think we can pass on that without discussion. It will be impossible for the directors to get their people together between now and then. I don't see that it is practicable. I think we should postpone this for consideration later.

DIRECTOR SCRIBNER: It seems to me a very simple matter. When a delegate appears at the door he can be assigned to his seat. It would facilitate matters, and each state will know how many representatives they have. They can hold their meetings there in the future.

DIRECTOR C. E. BEACH, of Washington: Inasmuch as it is difficult for me, and I presume equally difficult for other directors, to notify all those members from the state of Washington that this will be the method of voting tomorrow morning, I would like to move an amendment that this resolution become operative in the meeting of 1913.

The amendment was seconded.

DIRECTOR KIRK: I have not much interest in the matter myself, but it seems to me that if the usual Sunday-school convention plan be adopted, having banners for each section, our people can find their seats very easily. Ushers could point out the various banners, if that be necessary. I think it is easy.

PRESIDENT PEARSE: The Chair has heard a motion and a second, also an amendment to the effect that the plan be made effective for the meeting to be held in 1913.

DIRECTOR R. J. FULLER, of Massachusetts: I hope that the second motion will prevail. I believe that these matters should be given sufficient notice in this organization so that there can arise no misunderstanding in connection therewith.

DIRECTOR TEITRICK: I withdraw the whole matter.

PRESIDENT PEARSE: The motion is withdrawn, with the consent of the directors. Director Cook desires to offer a resolution.

DIRECTOR COOK: I wish to offer this resolution. I am not sure that the arrangement of the time is right.

Resolved, That it is the sense of the Board of Directors that there should be such modification of the Constitution and By-Laws as to require at least one year of active membership as a prerequisite for voting for officers of the Association.

In order to bring this resolution before the Board of Directors, I move its adoption.

PRESIDENT PEARSE: Are there remarks? The Chair is in doubt as to the effect of such a resolution.

DIRECTOR COOK: I ask for a roll-call on this motion. It is not binding for any future action.

PRESIDENT PEARSE: Merely an expression of opinion. The motion for the adoption of the resolution was seconded. Are there remarks?

The roll was called, resulting as follows: Ayes, 18; noes, 23.

Director Strachan, of New York, explained her vote as follows:

I think there should be some restriction. For instance, if the National Education Association should come to New York, we have an association with 14,000 members in it, and you see how easy it might be for the members of that city to control the business and policy of the Association at that time, and I think it would be pitiful for the National Education Association to be in any such danger.

But this seems to me to be useless just at this time, and furthermore, the order of business was called, and when the question of new business was raised, no resolution was offered. The last business of the afternoon was the unfinished business left over from yesterday. We were not expecting any new business, I think this is out of order. I therefore vote no.

PRESIDENT PEARSE: Is there any further business?

The meeting then adjourned.

IRWIN SHEPARD, *Secretary*

Approved,

CARROLL G. PEARSE, *President*

MINUTES OF THE MEETING OF THE NEW BOARD OF DIRECTORS FOR 1912–13

CHICAGO, ILL., THURSDAY, JULY 11, 1912

The meeting was called to order by President Fairchild at 4:30 P.M.

The roll was called, resulting as follows:

Present: Directors Edward T. Fairchild, of Kansas; Grace M. Shepherd, of Idaho; Irwin Shepard, of Minnesota; John W. Cook, of Illinois; James M. Greenwood, of Missouri; James Y. Joyner, of North Carolina; Charles I. Parker, of Illinois; Carroll G. Pearse, of Wisconsin; Nathan C. Schaeffer, of Pennsylvania; A. R. Taylor, of Illinois; John H. Phillips, of Alabama; A. J. Matthews, of Arizona; George B. Cook, of Arkansas; Archibald J. Cloud, of California; James B. Ragan, of Colorado; Arthur D. Call, of Connecticut; William M. Davidson, of the District of Columbia; Clem Hampton, of Florida; Aubrey Matthews, of Georgia; Walter R. Siders, of Idaho; William H. Campbell, of Illinois; Thomas A. Mott, of Indiana; O. P. Bostwick, of Iowa; John MacDonald, of Kansas; J. G. Crabbe, of Kentucky; Thomas H. Harris, of Louisiana; Robert J. Aley, of Maine; Charles J. Koch, of Maryland; Robert J. Fuller, of Massachusetts; E. E. Scribner, of Michigan; Julia H. Vaughan, of Minnesota; E. E. Bass, of Mississippi; William P. Evans, of Missouri; Ward H. Nye, of Montana; James E. Delzell, of Nebraska; F. M. Harper, of North Carolina; George A. McFarland, of North Dakota; J. T. Smith, of Ohio; Reed B. Teitrick, of Pennsylvania; C. G. Lawrence, of South Dakota; J. J. Keyes, of Tennessee; George N. Child, of Utah; Guy Potter Benton, of Vermont; C. E. Beach, of Washington; L. P. Benezet, of Wisconsin; Ernest E. Shuck, of Wyoming.

Number of directors present, forty-six.

PRESIDENT FAIRCHILD: Before the regular order of business I wish to present a matter that seems to be of considerable importance—one that the directors may well consider at this time in regard to one of the amendments to the By-Laws, which I am informed was adopted at the meeting yesterday. I shall read the part to which I desire to call your especial attention.

The first regular meeting of the new Board of Directors shall be held as soon as practicable and within twenty-four hours after the close of the last session of the annual meeting, the place and time of the meeting to be announced in the printed program.

The Chair has given considerable thought and has sought such advice as was available as to the meaning and application of this amendment. If the amendment, which I understand was passed yesterday, went into effect at once, then this meeting is not in order until after the gavel has sounded for the last time at the meeting Friday evening. The directors must then, within twenty-four hours, come together. Now these amendments nowhere suggest the time or circumstances under which they are to go into effect. There is no clause, so far as I have been able to discover, that says that they are to take effect on and after their passage. The statement which says (if I may repeat), "within twenty-four hours after the close of the last session, the place and time of the meeting to be announced in the printed program," would seem, inferentially at least, to suggest that it was not expected that this amendment should take effect upon its passage. A study of the wording of this particular sentence which I have read seems to reveal a considerable lack of clarity. The more I have studied this particular phrase the less sure I am as to the exact meaning. However, I would suggest that there is ground for the assumption that it is intended that this amendment should take effect next year, rather than at the present time. On the other hand, there are statements that warrant a conclusion that it is to go into effect at once. Upon the whole it seems to me that it would be wise for us to proceed under the old order of things. If any question arises

as to the legality of such action, a meeting of the directors may be called at the close of the final session Friday evening, at which time the proceedings of this afternoon might be ratified.

I desire also to call your attention to this proposition: it is possible that it is not the intention of the makers of this amendment to place the meeting of the directors beyond the time of the Association meeting. If the obvious interpretation is to apply, it seems that in the future no directors' meeting shall be held until the close of the regular session. Such an interpretation, however, of the amendment would surely work harm in that the sessions could not possibly represent the full deliberation so necessary to secure best results. Coming, if it did, at the close, but few directors would remain and the meeting would necessarily be greatly hurried. If the President of this Association would so rule, it might be wise to reopen this question at the general meeting in order that the statement might be clarified and so worded that the members of the directorate may understand it. I should be pleased to hear from anyone on this subject.

DIRECTOR E. E. SCRIBNER, of Michigan: My understanding (I was present at the time that article was read) was that the Board of Directors, the new board, were to meet within twenty-four hours after the close of the business session. What is the wording there?

PRESIDENT FAIRCHILD: Twenty-four hours after the close of the last session of the annual meeting.

DIRECTOR SCRIBNER: Are you sure that was the exact way it was passed?

DIRECTOR C. G. PEARSE, of Wisconsin: There has always been some question as to the time when the term of office of the old directors, the old President, old members of the Trustees, and so on, expired. The Articles of Incorporation provide that they shall serve until the close of the meeting following their election. That would make the term of the Board of Directors expire at the close of this meeting on Friday night, and would make the term of the President end Friday night. That has always been the recognized usage as to the President. The same usage should probably prevail as to the Board of Directors and the members of the Board of Trustees. Now, on this account there has always been a question about the legality of some acts; the question has never been pressed, but has been frequently discussed. In order to avoid that uncertainty, since the term continues until the end of the annual meeting subsequent to the election, it was thought best to allow the new Board of Directors to meet when there could be no question of the legality of the meeting or the right of the directors to their offices. While it has been customary to meet during the progress of the annual meeting, the right of officers to sit in those meetings has been questioned, and in case of a Trustee the right has been denied. As I understand it, in order to put at rest the possibility of question as to the right of the newly elected directors to sit and the newly elected President to preside and the newly organized Board of Directors to do business, the time set for the meeting of the new Board of Directors is after the close of the annual meeting. This meeting of the directors deals with matters like the selection of a few officials, including some members of the National Council; it listens to invitations for the next place of meeting; it makes some appropriations. Probably all these things could be attended to after the close of the meeting. Sometimes the last session of the annual meeting comes in the afternoon; in that case the directors could meet shortly after, on the same day. In case of an evening meeting, they could meet on the following morning. In order to clear the matter away, I move that the suggestion of the Chair made in the remarks which we have heard be followed: that the directors now proceed to transact their business in regular form; and that when they adjourn, they adjourn to meet at the close of the meeting on Friday evening, on the stage, for the purpose of formal ratification.

PRESIDENT FAIRCHILD: Is there a second to that motion?

DIRECTOR J. W. COOK, of Illinois: I second that motion, and I suggest that this precipitates another difficulty. If that be true, the old board is the legal body.

DIRECTOR SCRIBNER: Is it not true that the courts interpret only the meeting of a directorate which transacts business as the annual meeting of the directorate of a corporation? The meetings of this body which are for the purpose of hearing papers read and discussing those papers do not in any way affect the business of this corporate body, and therefore it seems to me that courts would hold that twenty-four hours after the meeting of the business session, which may transact business, which appropriates money, and so forth, terminates the term of the directors elected for any one year.

DIRECTOR J. M. GREENWOOD, of Missouri: It seems to me the reasonable construction of this amendment to the By-Laws would be this: I know of no body, legislative or deliberative, in which, just as soon as an act is passed, unless there is an emergency, it goes immediately into effect. Now, here in this particular case there is the action of the general Association yesterday afternoon. That has not been printed or published in any form so that the members of the Board of Directors could get hold of it. Furthermore, I am quite sure that no court would hold it necessary for us to meet here this afternoon and transact the business that comes up before us, and then have a corporal's guard on Friday night or Saturday morning get up and ratify what we have done. I am clearly of the opinion that if this amendment means anything, it is to take effect at the next meeting, after this body has adjourned, and then it should be applied. If it means printed in the program, there is no printed program: and under the Articles of Incorporation, here is a board regularly elected to transact business. I think that any court would hold that this body is properly elected, properly constituted under the Act of Incorporation, and that it is prepared to transact all business and adjourn, and that next year when the program is printed then this notice of twenty-four hours after the general session would go into effect. We could make the announcement then. It is impossible for us to meet under that twenty-four hours' limitation, because it has already expired. We stopped at 3:40 yesterday afternoon and we have no right to turn the clock back, even in Chicago. I believe it is unnecessary for us to have any other meeting of the Board of Directors except this meeting, regularly constituted to transact business.

DIRECTOR SCRIBNER: May I ask Mr. Greenwood a question? What is your interpretation as to what constitutes the last general session of this body?

DIRECTOR GREENWOOD: Yesterday afternoon, the business session. These other sessions are educational sessions, except this meeting of the new Board of Directors now in session.

DIRECTOR SCRIBNER: How about next year?

DIRECTOR JOHN MACDONALD, of Kansas: You and I may be dead next year.

PRESIDENT FAIRCHILD: Just a moment, please, if you will bear with the Chair. This section has to do with the annual meeting of the Association and that it shall be held in July on a day determined, two sessions to be held daily, and then it speaks of the annual business meeting of the active members, held on the fourth day of the annual meeting at eleven o'clock A.M. Then it provides for a meeting of the Board of Directors and uses the term "session" again rather than "meeting." I still submit that the whole thing needs clarifying that we may know what it does mean, and I am still wondering whether it is not possible for us to reopen this question at a general meeting and thus simplify matters.

DIRECTOR SCRIBNER: Let us open it. Is a motion in order, Mr. President?

DIRECTOR MACDONALD: Simply a single sentence. The business meeting has adjourned and we cannot reopen it.

DIRECTOR PEARSE: It is entirely immaterial to me, as the maker of the motion, whether or not it is adopted. I am perfectly willing to withdraw it. I made the motion as in line with the suggestion of the Chair, believing then, as I still believe, that it would clear away any particular difficulties. With reference to the other matter suggested by the Chair, the President of the Association is of the opinion that it has met and trans-

acted business, and it would not be proper to deal with business which came up at that meeting.

DIRECTOR COOK: Mr. President, it must be that Director Greenwood's view of this case is correct. It is inconceivable, it seems to me, that any By-Laws should go into effect in the midst of a meeting arranged for and entered upon under former By-Laws. As I understand it, the business meeting is to be held on the fourth day, and under present conditions it is held on the third day. By the very limitation of time it would be impossible to hold the business meeting on the fourth day. There would be a portion of the session after the By-Laws were adopted which would be illegal; should they become instantaneously operative, that portion would be illegal and adjournment would be illegal. It cannot be that these By-Laws should go into operation in the midst of the meeting provided for under the former By-Laws.

DIRECTOR C. J. KOCH, of Maryland: I wish to explain my vote on this question. It seems to me that there cannot be any question about the legality of our present proceedings. We have before us two questions. The first is the legality of this meeting and the second is with reference to future conduct. It plainly states here (altho the whole article is not plain, since it indiscriminately uses "meeting" and "session") that the first regular meeting of the new Board of Directors shall be held as soon as practicable, and so forth. Now, that must necessarily be the program of the annual meeting just printed. I simply state that I wish to vote against this motion. I am glad the maker does not care. I do believe that for future conduct in this matter you should take steps to find out whether the annual meeting does mean the annual business meeting.

DIRECTOR PEARSE: Since it is evident that the motion, which was intended to facilitate, is not to have that effect, I desire, with the consent of the second, to withdraw it.

PRESIDENT FAIRCHILD: The Chair would like to observe that the directors may well take notice of those applications on which no recommendation was made by the appropriations committee. Are there further remarks?

The first order of business following the roll-call is the election of a trustee to succeed Trustee James Y. Joyner, whose term expires at this meeting.

DIRECTOR F. M. HARPER, of North Carolina: North Carolina would be highly honored if Mr. Joyner should be elected to succeed himself.

DIRECTOR T. A. MOTT, of Indiana: I second the nomination.

DIRECTOR KATHERINE D. BLAKE, of New York: I move that the nominations be closed.

DIRECTOR MACDONALD: I move that the Secretary be instructed to cast the ballot for Mr. Joyner.

The motion was duly seconded and carried and the ballot was cast by the Secretary as directed.

PRESIDENT FAIRCHILD: The next item is the election of a member of the Executive Committee to succeed John H. Phillips, of Alabama, whose term expires at this meeting.

DIRECTOR T. H. HARRIS, of Louisiana: I wish to nominate for this position Superintendent George B. Cook, of Arkansas. Mr. Cook is in every way worthy of this distinguished honor. Under his leadership the schools of Arkansas have forged forward at a marvelous rate. He is a regular attendant upon the meetings of this Association, and I trust that this body will see fit to elect Mr. Cook to this position.

DIRECTOR J. E. DELZELL, of Nebraska: I second the nomination.

The motion was put and carried.

PRESIDENT FAIRCHILD: The next in order is the selection of members of the National Council to succeed members whose term expires at this session, also to fill vacancies. The Chair suggests a motion to appoint a nominating committee to report as promptly as possible.

DIRECTOR SCRIBNER: I make a motion that the Chair appoint a nominating committee of five to retire and report as soon as possible.

DIRECTOR BLAKE: I would like to amend that motion that at least one member be a lady.

The Chair nominated the following committee: Director William M. Davidson, of the District of Columbia; Director Robert J. Aley, of Maine; Director Nathan C. Schaeffer, of Pennsylvania; Director Katherine D. Blake, of New York; Director Clem Hampton, of Florida.

PRESIDENT FAIRCHILD: The next in order is the report of the Committee on Investigations and Appropriations of the National Council.

To the Board of Directors of the National Education Association:

We, the Committee on Investigations and Appropriations of the National Council of Education, recommend that the following amounts, or such amount thereof as may be necessary, be appropriated for the following named committees:

Committee on Articulation of High School and College	$ 300.00
Committee on College-Entrance Requirements in English Department of Secondary Education	350.00
Committee on Rural Schools	2,500.00
Committee on Musical Terminology	25.00
Committee on Geometry Syllabus	300.00
Committee on Standards and Tests of School Efficiency	500.00
Committee on Health Needs of Children	500.00
Committee on Economy of Time	250.00
Committee on International Council of Education	200.00

The committee submits as worthy, but without recommendation, the request of Mr. C. R. Rounds, chairman of the Committee on Uniform Nomenclature in English Grammar, that he be reimbursed for certain expenditures made in behalf of his committee.

Your Committee on Investigations and Appropriations believes that the growing tendency in the Departments of the National Education Association to ask for appropriations, and at the same time appoint committees to work under this appropriation, is reprehensible. The department president should present the names recommended for such committee to the President of the National Education Association or the president of the Council, who should make such nominations tentatively, guided by the recommendations from the department officials.

Relative to the request of the Joint Committee on Grammatical Terminology composed of members of the National Education Association, the Modern Language Association, and the American Philological Association, your Committee on Investigations and Appropriations cannot see their way clear to recommend an appropriation for expenses of a committee not composed of members of the National Education Association, when such members have not been appointed by the President of the National Education Association. We therefore submit the request of the above-named committee for an appropriation to the Board of Directors without recommendation or prejudice.

Respectfully submitted,

J. M. GREENWOOD, *Chairman*
F. A. FITZPATRICK
L. D. HARVEY
J. H. PHILLIPS
E. T. FAIRCHILD

PRESIDENT FAIRCHILD: It has been moved and seconded that the report be adopted.

DIRECTOR R. J. FULLER, of Massachusetts: I wish to propose an amendment to the report as submitted. This is with reference to the appropriation to the Committee on Health of Children. This committee has available from the American Medical Association a sum equal to the sum to be appropriated by this body today. The American Medical Association has already appropriated for such purpose a sum not to exceed $1,600. In other words, the American Medical Association is willing to hand over to our committee, not a joint committee, the sum of $1,600 for their use, asking us to equal that appropriation or to nearly equal it. I understand from the secretary of this committee that the committee needs $1,500 to $2,000 actually for their purposes, that they do not wish to use any part of this appropriation for purposes of transportation or for expenses of the committee. It is rather for purposes of distributing the literature thruout

the country to the various communities which need it. The whole movement this year will be carried on in the interests of bettering schoolhouse conditions and the buildings connected therewith in all communities, large and small. I would therefore move that this part of the report be amended to read an appropriation of $1,000 instead of $500.

DIRECTOR DELZELL: I second the motion.

PRESIDENT FAIRCHILD: It has been moved and seconded that the part of the report recommending that $500 be granted to the Committee on Health of Children be amended to read $1,000. Are there remarks?

DIRECTOR SCRIBNER: I noticed in Director Fuller's remarks that he stated that the American Medical Association had appropriated a sum not to exceed $1,600, or a sum equal to the sum that this body would appropriate. Their appropriation reads, "not to exceed $1,600." If we desire to co-operate with the American Medical Association in this work, it seems to me that our motion ought to read, "a sum not to exceed $1,000," rather than "an appropriation of $1,000."

PRESIDENT FAIRCHILD: The preliminary clause, that such amounts, "or as much as may be necessary thereof," covers the suggestion made by Director Scribner, I think.

DIRECTOR GREENWOOD: I inquired as to what would be the probable amount of money that could be used for these appropriations during the incoming year with safety. We found that the Rural Committee ought to have at least $4,000, but we did not have the money to appropriate. Other important committees, some that asked for $1,200 received $300. Our income for the year, that is, beginning with July 1 and closing June 30, 1913, will probably amount to just about what it was this year. Last year the recommendations made by the Committee on Investigations and Appropriations amounted to $3,200, or so much thereof as might be necessary. There was an appropriation made by the general Association of $3,000 yesterday, as you remember, in the business meeting. With $2,500 for one of the most important committees, we have to act, as I look at it, in accordance with the income that we will receive, and while I would like, as chairman of the Committee on Investigations and Appropriations, to grant every request up to the fullest extent, there were two or three requests that we threw out entirely. We have tried to recommend to you on a safe business basis. I wish that we could have appropriated for this particular committee $1,600, the amount asked for, but, gentlemen and ladies, we did not see our way clear to make appropriations when we did not know where the money would come from.

Motion of Director Fuller was then put and lost.

DIRECTOR MACDONALD: I don't think we ought to adopt this report when five members of the committee were absent.

DIRECTOR R. B. TEITRICK, of Pennsylvania: I have a communication from the president of the Manual Training Section which I would like to read in this connection:

CHICAGO, ILL., July 10, 1912

To the Council, National Education Association:

GENTLEMEN: On behalf of the Manual Training Section of the National Education Association I desire to request that an appropriation of $60 be granted to the Committee on College-Entrance Requirements.

This is the only committee of this section for which we are asking an appropriation, and in fact this is the only special appropriation that this section is asking for either for last year or for the coming year.

The work of this committee has been most valuable and is regarded as most important by the entire section. It has already had a helpful influence in securing college-entrance credits for drawing, manual training, and household economics—the subjects in which this section is primarily interested—and, what is equally important, has helped in securing greater freedom in general in the whole matter of college-entrance requirements.

This will grant to the high schools of the country greater freedom in shaping their courses of study to fit the local needs of their pupils in the special requirements of their communities; and no other service that I know of can be of more profound importance to the members of the section that I represent.

I regard it, therefore, as of the utmost importance to the section that the work of

this committee be continued; and if it is to be continued it must, of course, have funds with which to pay its necessary expenses for postage, stationery, multigraphing, etc. The amount that we are asking for—$60—is a conservative estimate.

I trust, therefore, that this appropriation will be granted.

Respectfully submitted,

(*Signed*) C. B. CONNELLEY, *President,*
Manual Training and Art Section
National Education Association

I move an amendment to the report, that the amount asked for, $60, be given this department.

PRESIDENT FAIRCHILD: I would like to inquire what committee that is.

DIRECTOR TEITRICK: The Committee of the Department of Manual Training and Art on College-Entrance Requirements.

DIRECTOR GREENWOOD: I received the same communication this afternoon. I have no objection to the appropriation of $60, but I don't know what it is for or where it comes from.

PRESIDENT FAIRCHILD: The Chair would like to ask that that motion be withdrawn until we dispose of the other.

The motion is on the adoption of the recommendations of the Committee on Investigations and Appropriations.

The motion was put and carried.

PRESIDENT FAIRCHILD: I will call your attention to the matters that will come under your consideration in addition to that suggested by Mr. Teitrick. Mr. C. R. Rounds asks to be reimbursed for certain expenditures on behalf of the Committee on Uniform Nomenclature. Mr. Rounds seems to have done a great deal of work, and so far as we can learn, the only work that has been done in this committee for the present, and he has personally met all of the expenses, amounting to some $250. He is, like many of us, dependent entirely upon his salary, and while the committee feels that he ought to be reimbursed for the actual expenditures made, they did feel that the committee was not in a position to establish a precedent in the way of refunds, and would prefer that the directors take the matter up. That, together with the other suggestion, and then the one relative to the joint committee on grammatical terminology, in which, as I now recall, he asked for quite an amount of money, is to come to your attention.

DIRECTOR J. J. KEYES, of Tennessee: I would like to ask if the Committee on Nomenclature was regularly appointed by the Association.

PRESIDENT FAIRCHILD: I understand so. Chairman Greenwood will answer that, I think.

DIRECTOR GREENWOOD: Last year there was a communication from Mr. Rounds, stating that he was engaged in this work. It came to the Committee on Appropriations. He stated something about his expenditures and the matter was brought before the Board of Directors at San Francisco and was laid over for report at this time. We wanted a more specific statement, so we have an itemized statement in regard to what he had done, the expense, and the vast amount of correspondence. The committee at this time felt that Mr. Rounds ought to be refunded. He is working in connection with two other associations. While we did not feel like making a direct appropriation, we felt that it was only a matter of justice to Mr. Rounds that a refund of $250 be made, and some other additional appropriation made. I would move that Mr. Rounds be refunded the $250 which he has expended. I am quite sure he is doing very valuable work in connection with other members of the committee.

DIRECTOR PEARSE: If there is any information needed, I should be glad to give it. The committee of which Mr. Rounds is chairman was first appointed by the Department of Superintendence and afterward authorized by the Association. It is working in connection with a committee from the Modern Language Association and the American

Philological Association. His committee has been regularly authorized for one year and much valuable work has been done.

PRESIDENT FAIRCHILD: The Chair would state that the committee is very glad to get that information.

The motion is that Mr. Rounds be reimbursed to the amount of $250 for expenses already incurred.

The motion was put and carried.

PRESIDENT FAIRCHILD: The same committee also asks for $1,200.

DIRECTOR SCRIBNER: I believe it is unwise for us, except in very unusual cases, to appropriate money until the Committee on Investigations and Appropriations have had an opportunity to investigate and recommend. I move that this appropriation asked for be referred back to the committee to report next year.

Motion was put and carried.

DIRECTOR TEITRICK: I should like to move that the amount asked for by the Committee on College-Entrance Requirements of the Department of Manual Training and Art be granted.

Motion put and carried.

PRESIDENT FAIRCHILD: The next order of business is the report of the Committee on Nominations for the Council.

DIRECTOR W. M. DAVIDSON, of District of Columbia: Your Committee on Nominations for the National Council reports as follows:

TERMS TO EXPIRE IN 1918

Thomas A. Mott, of Richmond, Ind., to succeed himself.
John H. Phillips of Birminghan, Ala., to succeed himself.
Francis G. Blair, of Springfield, Ill., to succeed himself.
James H. Baker, of Boulder, Colo., to succeed himself.
Ellen C. Sabin, of Milwaukee, Wis., to succeed herself.
Charles S. Meek, of Boise, Idaho, to succeed himself.
E. E. Scribner, of Ishpeming, Mich., to succeed himself.
A. A. Murphree, of Gainesville, Fla., to succeed J. A. Smith of Deland, Fla., absent for two successive years.
Helen C. Putnam, of Providence, R.I., to succeed Walter E. Ranger, of Providence, R.I., absent for two successive years.
E. T. Fairchild, of Durham, N.H., to succeed himself.

TERMS TO EXPIRE IN 1913

A. J. Kinnaman, of Bowling Green, Ky., to succeed E. H. Mark, of Louisville, Ky., absent for two successive years.
J. L. Snyder, of Agricultural College, Mich., to succeed Thomas M. Balliet, of New York, N.Y., absent for two successive years.

TERM TO EXPIRE IN 1916

Estelle Carpenter, of San Francisco, Cal., to succeed Frank B. Cooper, of Seattle, Wash., absent for two successive years.

TERMS TO EXPIRE IN 1917

J. G. Crabbe of Richmond, Ky., to succeed W. H. Bartholomew, of Louisville, Ky., absent for two successive years.
Margaret E. Schallenberger of San José, Cal., to succeed Estelle Reel Meyer, of Washington, D.C., absent for two successive years.
William E. Wilson, of Ellensburg, Wash., to succeed Julius I. Foust, of Greensboro, N.C., absent for two successive years.

TO BE TRANSFERRED TO THE HONORARY LIST

J. A. Smith, of Deland, Fla.
Walter E. Ranger, of Providence, R.I.
E. H. Mark, of Louisville, Ky.
Thomas M. Balliet, of New York, N.Y.
W. H. Bartholomew, of Louisville, Ky.
Estelle R. Meyer, of Washington, D.C.
Julius I. Foust, of Greensboro, N.C.
Frank B. Cooper, of Seattle, Wash.

The report of the committee was on motion accepted and adopted.

PRESIDENT FAIRCHILD: The next business is the reception of invitations for the place of meeting of the next annual convention.

DIRECTOR GREENWOOD: I have a request from President Thompson, of the University of Ohio, for an appropriation for the expenses of the Committee on the National University.

DIRECTOR SCRIBNER: I move that this request be referred to the Committee on Investigations and Appropriations.

DIRECTOR PEARSE: Before the motion is put, I perhaps ought to say this: The Association at a meeting three or four years ago made an appropriation for the fostering of sentiment for and to help forward the movement for a national university. The appropriation was $500. Some conditions were attached, and later the money was not available, so no money has ever been used for this purpose. This Association has a committee on the promotion of a national university: its membership is in print. In the judgment of those gentlemen who were here, President James, of Illinois, and others, the time has come for us to do something besides talk. He urges that the appropriation, at least as much as was formerly made, but later was not available, be now made available by this Board of Directors for the use of this committee which has been appointed to forward the idea of a national university.

As a substitute for the motion offered by Director Scribner, I move that this body appropriate a sum not to exceed $500 to be available during the coming year.

DIRECTOR DAVIDSON: I was delegated by the chairman of the committee of four hundred on a national university to, if possible, say a word, if opportunity presented, in furtherance of the movement from the standpoint of the national association, soliciting co-operation with what they are attempting to do along the line of manufacturing sentiment. That committee has presented a bill, a very satisfactory bill, which will be introduced doubtless on Tuesday of this week and will be ready for circulation within a very short time. That will be a great organization in assisting the furthering of this national university sentiment. They are back of it, ready to join hands with the National Education Association and its members in seeing that a great university is established.

PRESIDENT FAIRCHILD: The motion is made and seconded that the original motion be amended so that $500 shall be granted.

DIRECTOR SCRIBNER: I withdraw my motion.

PRESIDENT FAIRCHILD: The motion is that $500 be made available. Are there any further remarks?

The motion was put and carried.

DIRECTOR PEARSE: I have a request from the Fifteenth International Congress on Hygiene and Demography that this Association or this Board of Directors authorize the President to appoint delegates to that meeting. It need not carry any expense to the Association, and doubtless persons living not far away would be glad to act as delegates and this organization would then be represented.

I move that the President be authorized to appoint a number of delegates, such as in his judgment may be proper, to represent this Association at the Fifteenth Congress,

The motion was put and carried.

Invitations for the Fifty-first Convention were then presented as follows:

By D. H. Christensen for Salt Lake City.

By J. A. Shawan for Columbus, Ohio.

Other invitations were as follows:

By Director Vaughan, of Minnesota, for St. Paul in 1914.

By Director Cloud, of California, for San Francisco in 1915. He presented the following:

The President and Directors of the Panama-Pacific Universal Exposition to be held in San Francisco, in 1915, have the honor to extend to the National Education Association a cordial invitation to hold its 1915 meeting in San Francisco.

This city has been selected by Congress with the approval of the President of the United States as the official site for celebrating the uniting of the waters of the Pacific and the Atlantic thru the Panama Canal, the greatest physical accomplishment achieved by man. The Exposition will not only attempt to show that which is most advanced in invention, most interesting in art, and of greatest scientific value, embracing all that is most important in the material progress of the world, but it will be the aim of the Directors to make this rank in intellectual interest above all previous expositions, to bring together so much of wisdom, so much of practical scientific thought and so much of broad grasp of the world's important problems that the progress of mankind shall be advanced a quarter of a century.

To assist in achieving this aim, we invite your presence in the city of San Francisco in the year 1915.

BENJ. I. WHEELER
President, University of California

DAVID STARR JORDAN
President, Leland Stanford Jr. University

RUDOLPH J. TAUSSIG
Chairman, Committee on Exploitation

JOHN BRISKEN WALKER
Director of Congresses

CHARLES C. MOORE
President

F. J. SKIFF
Director in Chief of Foreign and Domestic Participation

James Ferguson, of California, spoke in favor of San Francisco as the place of meeting in 1915.

Director Siders, of Idaho, and Director Greenwood, of Missouri, spoke in favor of Salt Lake City.

The Directors then passed, by a unanimous vote, a motion of preference for Salt Lake City, final arrangements to be left to the Executive Committee.

The meeting then adjourned.

Approved,

E. T. FAIRCHILD, *President* IRWIN SHEPARD, *Secretary*

MINUTES OF THE MEETINGS OF THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION IN CONNECTION WITH THE FIFTIETH ANNUAL CONVENTION IN CHICAGO, ILL.

PLANTERS HOTEL
ST. LOUIS, February 27, 1912

Pursuant to a call made by James M. Greenwood, chairman of the Board of Trustees of the National Education Association, the board met in Parlor E at 9:25 A.M.

Trustees Greenwood, Joyner, Pearse, and Aley were present. Trustee Brown was absent.

The secretary read the call of the meeting, which, under date of February 8, 1912, had been mailed to each trustee. This call was as follows:

J. M. Greenwood, chairman of the Board of Trustees of the National Education Association, has called a meeting at 10 A.M., February 27, at the desk of the Secretary of the National Education Association in the Planters Hotel, St. Louis, Mo. This meeting is to be held for the transaction of such business as may regularly come before the Board of Trustees.

The chairman of the board had received several requests for appropriations and also several inquiries as to the probability of future appropriations. By vote of the Trustees the chairman was instructed to inform those making requests or inquiries that the Trustees do not make appropriations.

The secretary made a preliminary report on his examination of the papers containing the records of the actions of the Trustees prior to July, 1896.

By vote of the Trustees the secretary was instructed to write a report upon these papers and records and submit to the Trustees at the annual meeting in July.

The secretary was also instructed, after he completes the examination, to send these papers and records to Secretary Irwin Shepard for safekeeping.

At 11:50 A.M. the Board of Trustees adjourned to meet at the same place at 2:00 P.M., February 28.

ROBERT J. ALEY, *Secretary*

J. M. GREENWOOD, *Chairman*

PLANTERS HOTEL
ST. LOUIS, February 28, 1912

Pursuant to the adjournment of the meeting of February 27, the Trustees met and were called to order at 2:30 P.M. by Chairman Greenwood.

Trustees Greenwood, Pearse, Joyner, Brown, and Aley were present at the meeting.

By vote of the Trustees, Chairman Greenwood was authorized to invest any funds that may become available either from the receipts of the Association or from the maturity of investments. Before making the investment, the chairman will communicate with the other trustees, by either letter or telegram, and secure their approval of the proposed investment.

The following resolution was introduced by Trustee Pearse, and was unanimously approved by the Board of Trustees:

That the President of the Association be authorized to secure the services of an expert, licensed accountant to go over the papers of the Trustees and their accounts and to report his findings thereon to the President, before the next meeting of the Association;

also to report any suggestions he thinks proper, relative to possible improvements in methods of transacting the business of the Association, or in the methods of accounting.

At 3:50 P.M. the Board of Trustees adjourned.

ROBERT J. ALEY, *Secretary*

JAMES M. GREENWOOD, *Chairman*

CHICAGO, ILL., July 8, 1912

Pursuant to a regular official call, the Board of Trustees of the National Education Association met at Secretary Shepard's desk, Ladies' Parlor, Auditorium Hotel, Chicago, Ill., at noon, July 8, 1912.

There were present Trustees Pearse, Greenwood, Joyner, Brown, and Aley.

Chairman Greenwood reported that he had a chance to sell the Chicago real estate belonging to the National Education Association for $3,500 in cash.

Upon motion of Trustee Brown, the chairman of the Board of Trustees was authorized by unanimous vote to make further investigation and if the offer proved to be a fair value for the property, to make the sale and to take proper measures to invest the proceeds in securities.

Upon motion of Trustee Joyner, the board gave unanimous approval of the secretary's minutes of business transacted by mail.

The annual report of the Board of Trustees was ordered to be spread upon the record.

The board adjourned to meet at the same place, Thursday, July 11, at 9:00 A.M.

ROBERT J. ALEY, *Secretary*

JAMES M. GREENWOOD, *Chairman*

BUSINESS TRANSACTED BY MAIL

Under date of May 15, 1912, the following order was issued to Mr. Louis Boisot, Trust Officer, Chicago, Ill.

KANSAS CITY, MO., May 15, 1912

Mr. Louis Boisot, Trust Officer,
Chicago, Ill.

DEAR SIR: You are hereby authorized to transfer to the First National Bank all revenues arising from the investment of the Permanent Fund of the National Education Association, and to deposit the same to the credit of the Treasurer of the National Education Association, on or before June 1, 1912.

Will you have the kindness to notify the Treasurer of the Association of your action, and also transmit the item of expense connected therewith to the Secretary, Dr. Irwin Shepard, that the bill may be included in the expense account of the current month.

Very truly yours,

(*Signed*) J M. GREENWOOD
Chairman of the Board of Trustees

INVESTMENT

Having been informed by the President of the National Education Association, and the members of the Executive Committee associated with him, that there was a fund of approximately ten thousand dollars ($10,000) awaiting investment, Chairman Greenwood asked the members of the Board of Trustees to authorize him to look up a good investment. This authorization was given by mail.

After some investigation, Mr. Greenwood recommended the purchase of $10,000 School District of Kansas City, Mo., 3½ per cent school bonds, dated July 1, 1905, and due July 1, 1925.

Chairman Greenwood having submitted this proposed purchase to the members of

the board and receiving from them by mail their favorable answer, the investment was made, as is shown by the attached receipt.

PROFESSOR J. M. GREENWOOD Kansas City, Mo.	H. P. WRIGHT INVESTMENT CO. Investment Securities 923 Baltimore Ave. Kansas City, Mo.
Bought:	June 12, 1912

$10,000 School District of Kansas City, Mo., 3½ per cent school bonds, dated July 1, 1905, due July 1, 1925, interest payable semiannually January first and July first, both principal and interest payable at the National Bank of Commerce. New York City, Nos. 3127, 3128, 3129, 3133, 3135, 3136, 3190, 3191, 3192, and 3200 for $1,000 each at 95 ..... $9,500.00
Accrued interest January 1 to June 12 (5 months, 11 days) 156.53

$9,656.53

Received payment.

CHAS. BEGGS, *Cashier*

KANSAS CITY, MO., June 14, 1912

President Robert J. Aley,
Orono, Me.

DEAR PRESIDENT ALEY: I have just received a note from Mr. Boisot in which he suggests that I put five hundred dollars ($500) instead of $343.77 into the Permanent Fund. In compliance with his suggestion, I will send him my personal check for $156.53, the amount of the accrued interest at the time of the purchase of the bonds and as noted in the memorandum that I sent to you yesterday. I will then ask the Association to refund the amount of the check to me. This, you will observe, will be the transference of $10,000 to the Permanent Fund. This correction will enable you to keep your book in proper form which would have introduced some confusion by deducting the item of interest as previously mentioned.

I am

Very truly yours,

(*Signed*) J. M. GREENWOOD
ROBERT J. ALEY, *Secretary*

JAMES M. GREENWOOD, *Chairman*

CHICAGO, ILL., July, 11, 1912

The Board of Trustees of the National Education Association met in the Ladies' Parlor of the Auditorium Hotel, Chicago, Ill., at 9:00 A.M. pursuant to the adjournment of July 8. The following report was presented:

THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION

Pursuant to an order passed by the Board of Trustees at the St. Louis meeting in February, 1912, I have examined the papers relating to the business of the National Education Association prior to August 1, 1896. These papers consist of letters, vouchers, bankbooks, account-books, and various matters relating to the financial transactions of the Association. I have gone thru them with care and have tied them in twelve packages. The contents of each package is noted in the accompanying report.

On April 9, 1912, the packages were shipped to Irwin Shepard, Winona, Minn., for permanent safekeeping. Each package was properly numbered and accompanying the shipment was a duplicate of the list, which is here submitted. If this report is made a part of the minutes of the Board of Trustees, no future examination of these papers will be necessary.

Respectfully submitted,
ROBERT J. ALEY
Secretary, Board of Trustees

PACKAGE NO. 1

This package contains the following:

a) Treasurer's account and book containing a written statement of the dates of the Treasurer's accounts from 1883 to June, 1896.

b) Board of Trustees Permanent Fund.

This book contains items relating to the Permanent Fund, beginning with 1878 and extending to December, 1895.

c) Board of Trustees Financial Record.

This book contains the financial records of the investments of the Board of Trustees from 1885 to December, 1895.

d) Board of Trustees Emergency Fund.

This book contains an account of the emergency fund collected and expended for various committees from 1892 to June, 1895.

PACKAGE NO. 2

This package contains the following:

a) Papers relating to the incorporation of the National Education Association and minutes of Trustees' meetings, Washington, February 25, 1886, and Topeka, July 26, 1886.

b) N. A. Calkins' account for 1893.

c) J. M. Greenwood's account for 1893.

d) N. A. Calkins' bankbook, National Broadway Bank, N.Y.

e) Treasurer's report for 1892, including vouchers.

f) Miscellaneous vouchers and matters of correspondence relating to Treasurer's accounts, 1892–93.

g) Funds of 1887, and matters relating to the care of the same by the Board of Trustees.

PACKAGE NO. 3

This package contains the following:

a) Telegram from John Eaton, letter from Dr. Tappan, and declaration of trust, N. A. Calkins.

b) Vouchers for 1887.

c) Matters relating to investments, receipts, cancelled checks.

d) Letters and documents pertaining to investments.

e) Same as (*d*).

f) Letters and papers from Dr. Tappan.

g) Correspondence received by Treasurer Calkins.

h) Miscellaneous matters relating to Calkins, Richards, and Tappan.

PACKAGE NO. 4

This package contains the following:

a) Committee of 10 and 15.

b) Report of Board of Trustees for 1888–89.

c) List of securities 1889, 1891, 1892.

d) Borland's Bill.

e) Bankbook, Mercantile Trust Co., N.Y., 1887.

f) Minutes of directors' meetings, 1892.

g) Miscellaneous records and items concerning investments.

PACKAGE NO. 5

This package contains the following:

a) Vouchers, receipted bills, and general financial account of Treasurer N. A. Calkins, for the year 1894–95.

PACKAGE NO. 6

This package contains the following:

a) Miscellaneous papers relating to deposits in the National Bank of the Republic, and vouchers for a few bills. It covers in the main the years 1897–98.

PACKAGE NO. 7

This package contains the following:

a) Cancelled checks, receipted vouchers covering in the main the years 1895–96.

PACKAGE NO. 8

This package contains the following:

a) Cancelled checks.

b) Vouchers dated November, 1898.

c) Checkbook, Bank of Grand Avenue, Kansas City, Mo., containing a number of cancelled checks.
d) Cancelled checks and receipted vouchers.
e) Paper relating to work of J. M. Greenwood as Treasurer.
f) Relating to Trustees' report for 1896.
g) Relating to Trustees' report for 1905.
h) Relating to Trustees' report for 1903.
i) Relating to Trustees' report for 1897.
j) List of bills for 1904–05.
k) Miscellaneous bills and vouchers mainly for 1897–98.
l) Vouchers for 1897.
m) Treasurer McNeil's report.

PACKAGE NO. 9

This package contains the following:
a) Bankbooks, checkbooks, and cancelled checks from C. G. Pearse, Treasurer.
b) Vouchers, miscellaneous papers from Lane and McNeil.
c) Cancelled checks and bankbook, C. G. Pearse.
d) Cancelled bonds, miscellaneous papers, and McNeil's checkbook.
e) Bankbook, cancelled checks, and reports of A. C. Lane, chairman, Board of Trustees.

PACKAGE NO. 10

This package contains the following:
a) A book containing the accounts of A. C. Lane and I. C. McNeil.
b) Cash book used by J. M. Greenwood when Treasurer.
c) Cash book extending from July, 1903, to July, 1907.

PACKAGE NO. 11

This package contains the following:
a) A book giving lists of bonds and coupons owned by the National Education Association.

PACKAGE NO. 12

This package contains the following:
a) Three books of National Education Association order stubs.

April 9, 1912

THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION

Among the papers belonging to the Trustees of the National Education Association which I examined, I was able to find the following minutes of Trustees' meetings which, it seems to me, should be made part of the permanent record of this body.

Respectfully submitted,
ROBERT J. ALEY
Secretary, Board of Trustees

MINUTES, FIRST MEETING OF THE TRUSTEES OF THE NATIONAL EDUCATIONAL ASSOCIATION

The Trustees of the National Educational Association met on the 25th day of February, 1886, in the city of Washington, D.C.

Present: Norman A. Calkins, John Eaton, and Zalmon Richards.

The above-named Trustees proceeded to make a preliminary organization by choosing N. A. Calkins as chairman and Zalmon Richards as Secretary.

It was resolved to meet at Topeka, Kans., July 13, 1886, and to submit the matter and manner of perfecting the organization of the Association, under the corporate power, secured by instruction of the Board of Directors of the National Educational Association, at their meeting, held at Saratoga in 1885, to the meeting of the said directors at Topeka, Kans., in July, 1886, for approval and adoption.

Adjourned.

Z. RICHARDS, *Secretary*

(True copy)

Resolved, That the title by which this Association shall be known, shall be the "National Educational Association," and that this resolution for change of name be duly recorded so as to amend the Certification of Organization executed and recorded,

February 24, 1886—in Liber No. 4, folio 36 et seq.—Acts of Incorporation for the District of Columbia.

Resolved, That the chairman of this Board of Trustees is hereby declared to be the executive officer of the board, and he is duly empowered to act for and in behalf of said board in the transaction of its ordinary business during the intervals between the meeting of the Trustees.

Adjourned.

Z. RICHARDS, *Secretary*

(True copy)

The above resolution was readopted by the Board of Trustees, at their meeting held in Central Music Hall, Chicago, Ill., July 15, 1887.

MINUTES, MEETING OF THE TRUSTEES OF THE NATIONAL EDUCATIONAL ASSOCIATION

SARATOGA SPRINGS, July, 12, 1892

A meeting of the Board of Trustees was held, at Congress Hall, Saratoga Springs, July 12, 1892.

Present: H. S. Tarbell, N. A. Calkins, and Z. Richards.

The matter of providing a fund of the National Educational Association, from which sums of money may be designated for definite purposes, to be disbursed under the supervision of the Board of Trustees, was considered.

On motion of Trustee Tarbell it was

Voted, That the Board of Trustees recommend the establishment of an Emergency Fund—to be subject to expenditure by the Board of Trustees in accordance with vote of the Board of Directors at any regularly called meeting—the said fund may be used for the purpose of meeting deficiencies of income of the Association, and for such additional investigation and publications as may be determined by said Board of Directors.

Voted, That the Emergency Fund be constituted by transferring from the balance of receipts of the Association for any year, after all expenses and other liabilities for said year have been duly paid, such sum as may be deemed expedient by the Board of Trustees under the provisions of the Constitution, in Section 10, Article 4, provided that the total amount in said Emergency Fund shall not exceed in any year the sum of four thousand dollars.

CHICOPEE FALLS, MASS., July 14, 1894

DEAR MR. CALKINS:

Below is a copy of the record of our transaction yesterday, correct, as I believe.

Yours truly,

EDWIN C. HEWETT

The Trustees of the National Educational Association met at the West End Hotel in Asbury Park at 9:00 A.M., July 13, 1894.

Present: Calkins, Tarbell, Hewett.

N. A. Calkins was chosen chairman of the board.

Zalmon Richards was chosen clerk and curator, for which services his salary was fixed at fifty dollars per annum.

Edwin C. Hewett was appointed clerk, *pro tem.*

It was voted that Chairman Calkins be empowered to act for the board in all matters in which he may choose to take that responsibility.

Adjourned.

EDWIN C. HEWETT, *Clerk, pro tem*

Upon motion of Trustee Pearse, the report was accepted and ordered to be made a part of the official minutes of the Board of Trustees.

The board adjourned to meet at the same place Friday evening, July 12, immediately following the meeting of the Board of Directors.

ROBERT J. ALEY, *Secretary*

J. M. GREENWOOD, *Chairman*

CHICAGO, JULY 12, 1912

The Board of Trustees met pursuant to adjournment in the Ladies' Parlor of the Auditorium Hotel, Chicago, at 11:15 P.M.

There were present Trustees Greenwood, Brown, Joyner, Aley, and Fairchild.

The Board of Trustees immediately adjourned from the Ladies' Parlor to Room 346, Auditorium Hotel.

The Board was organized for the ensuing year by the unanimous election of the following officers:

James M. Greenwood, Kansas City, Mo., chairman, and Robert J. Aley, Orono, Me., secretary.

Chairman Greenwood reported that he had investigated the price offered for the Lake Avenue property and was convinced that the offer should be accepted.

By vote of the Board of Trustees, J. Stanley Brown was instructed to complete in proper legal manner the sale of the property at 4762 Lake Avenue, Chicago.

Dr. Irwin Shepard tendered his resignation as Secretary of the National Education Association. He requested that the same take effect July 31, 1912. The resignation was accepted to take effect when a successor is duly elected and qualified.

Upon motion of Trustee Aley, the Board of Trustees voted to make a special appeal to the Carnegie Foundation in behalf of Dr. Shepard.

The board adjourned to meet at the call of the officers, on or about August 24, 1912, at Columbus, Ohio.

ROBERT J. ALEY, *Secretary*

JAMES M. GREENWOOD, *Chairman*

CHICAGO, ILL., August 5, 1912

An official call for the meeting of the Board of Trustees of the National Education Association having been regularly made by Chairman James M. Greenwood, the board met in Room 128, Auditorium Hotel, Chicago, Monday forenoon, August 5, 1912. The change of the time and meeting-place from the adjournment vote of July 12 was due to the necessity of electing a Secretary earlier than had been anticipated.

There were present at the meeting Trustees James M. Greenwood, J. Stanley Brown, J. Y. Joyner, E. T. Fairchild, and Robert J. Aley.

The meeting was called for the purpose of electing a Secretary of the National Education Association to succeed Irwin Shepard, who gave his resignation to the board July 12, 1912.

By unanimous vote the Board of Trustees adopted the following resolution concerning the resignation of Dr. Irwin Shepard:

In accepting the resignation of Secretary Irwin Shepard, the Board of Trustees of the National Education Association express their high appreciation of the long, helpful, and conscientious service he has rendered the corporation.

In whatsoever work he may engage, he will carry with him the gratitude of his hosts of friends in every state of the American Union.

It is the earnest wish of this body that his future years may be as full of benefit to the educational world as have been his past.

By unanimous vote of the Board of Trustees, D. W. Springer was elected Secretary of the National Education Association for a term of four years with a salary schedule as follows: First year, $4,000; second year, $4,500; third and fourth years, $5,000.

After considerable discussion, the Board of Trustees by unanimous vote recommended to the Board of Directors that the office and residence of the Secretary of the National Education Association be at Indianapolis, Ind.

Trustees Fairchild and Aley were made a committee to arrange for the closing of the office at Winona, Minn., and the opening of the new office at Indianapolis.

Secretary Aley was instructed to notify Mr. Springer of his election. He did so by sending him the following letter:

CHICAGO, ILL., August 5, 1912

Prof. D. W. Springer,
Detroit, Mich.

MY DEAR MR. SPRINGER: At a meeting of the Board of Trustees of the National Education Association held in the Auditorium Hotel, Chicago, this day, you were unanimously elected Secretary of the Association to succeed Irwin Shepard, resigned. Your election is for a term of four years, with a salary schedule as follows:

First year, $4,000; second year, $4,500; third year, $5,000, and thereafter, $5,000.

It is expected that you will begin on your duties at once. You should go to Winona, Minn., at your earliest convenience, file your bond, and do whatever other details are necessary. Mr. Shepard is very anxious to be relieved at the earliest possible moment.

It was unanimously recommended by the board that the office and residence of the Secretary be established at Indianapolis, Ind. It will probably not be feasible to make this transfer for some time. President Fairchild and Secretary Aley were made a committee to arrange for the lease of offices and to take charge of the details of the transfer. This committee will correspond with you concerning the matter.

Please write me at my home address.

Very cordially yours,
ROBERT J. ALEY

Having completed the business for which the meeting was called, the board adjourned.

ROBERT J. ALEY, *Secretary*

J. M. GREENWOOD, *Chairman*

Necrology

From December 25, 1911, to December 31, 1912

Reports of the death of the following life, active, and corresponding members have been received since December 25, 1911; the date of decease follows each name.

Ira Wilder Allen (February 10, 1912) . . . . . Chicago, Ill.
Margaret Bancroft (January 3, 1912) . . . . . Haddonfield, N.J.
Archer Clinton Bowen (January 19, 1912) . . . . North Adams, Mass.
John E. Bradley (October 7, 1912) . . . . . Randolph, Mass.
Edward Brooks (June 21, 1912) . . . . . Philadelphia, Pa.
Elmer G. Bunnell (November 10, 1912) . . . . . Indianapolis, Ind.
Clarence Franklin Carroll (June 14, 1912) . . . Marblehead, Mass.
Francis John Cheney (September 1, 1912) . . . . Cortland, N.Y.
Charles W. Cole (August 27, 1912) . . . . . Albany, N.Y.
Loulie Compton (June 30, 1912) . . . . . Birmingham, Ala.
Edwin Bruce Cox (January 22, 1912) . . . . . Xenia, Ohio
John Caldwell Crawford (July 27, 1912) . . . . Wadesboro, N.C.
Mrs. Sarah Platt Decker (July 7, 1912) . . . . . Denver, Colo.
Faustin S. Delany (January 18, 1912) . . . . . Louisville, Ky.
Matthew J. Elgas (September 1, 1912) . . . . . New York, N.Y.
Julia M. Farquhar (October 3, 1912) . . . . . Louisville, Ky.
Robert Fischer (January 6, 1912) . . . . . Indianapolis, Ind.
J. R. Flickinger (February 17, 1912) . . . . . Lock Haven, Pa.
Isaac K. Funk (April 4, 1912) . . . . . New York, N.Y.
Wallace Kendall Gaylord (March 19, 1912) . . . Berkeley, Cal.
Harry Edmund Giles (April 11, 1912) . . . . . Oberlin, Ohio
Aaron Grady (December 14, 1912) . . . . . Nelsonville, Ohio
S. Hermoine Hart (October 1, 1911) . . . . . Paris, Idaho
Caroline T. Haven (September 8, 1912) . . . . New York, N.Y.
John A. Heizer (November 5, 1911) . . . . . Cincinnati, Ohio
William P. Herrick (June 10, 1912). . . . . Denver, Colo.
Russell Hinman (April 28, 1912) . . . . . New York, N.Y.
John Wesley Hoyt (May 23, 1912) . . . . . Washington, D.C.
William R. Jackson (January 9, 1912) . . . . . Lincoln, Nebr.
Eli M. Lamb (January 25, 1911) . . . . . Baltimore, Md.
Pierre Emile Levasseur (Corresponding Member) . Paris, France
Martha Blair May (June 9, 1912) . . . . . Rockland, Me.
Edward H. McLachlin (October 19, 1911) . . . . East Peacham, Vt.
Fred M. McMurray (June 7, 1911) . . . . . Mansfield, Ga.
Mary Jerome Merritt (May 11, 1912) . . . . . Brooklyn, N.Y.
Robert Comfort Metcalf (October 16, 1912) . . . Winchester, Mass.
Jesse H. Michener (December 22, 1912) . . . . . Philadelphia, Pa.
Wilhelm Münch (Corresponding Member) . . . . . Berlin, Germany
Mrs. Mary J. Parolini (January 10, 1912) . . . . San Francisco, Cal.
John Bradley Peaslee (January 4, 1912) . . . . . Cincinnati, Ohio
Reece W. Perkins (July 1, 1912) . . . . . New Orleans, La.
Rollie A. Petrie (October 2, 1912) . . . . . East Troy, Wis.

GILBERT RANDOM (1912) . . . . . Sacramento, Cal.
JULIA RICHMAN (June 25, 1912) . . . . . New York, N.Y.
ROBERT J. ROUND (November 24, 1911) . . . . . Elmira, N.Y.
BESSIE M. SCHOLFIELD (December 7, 1911) . . . . . Providence, R.I.
JAMES FRED SMITH (July 8, 1912) . . . . . Campbell, Cal.
BENJAMIN FRANKLIN STACEY (March 5, 1912) . . . . Pasadena, Cal.
J. M. STEVENSON (January 29, 1912) . . . . . Kansas City, Mo.
WALTER EVANS STRIPLIN (May 26, 1912) . . . . . Gadsden, Ala.
ALBION WESLEY STUART (October 15, 1912) . . . . Ottumwa, Iowa
MRS. GRACE B. SUDBOROUGH (September 15, 1912) . Omaha, Nebr.
RALPH STOCKMAN TARR (March 21, 1912) . . . . . Ithaca, N.Y.
JOHN HENRY THIRY (June 23, 1911) . . . . . Long Island City, N.Y.
CHARLES E. TILTON (December 21, 1912) . . . . . Bangor, Me.
MRS. GEORGIANA VAN AKEN (August 20, 1912) . . . Jersey City Heights, N.J.
MRS. MARY E. VAN WAGONEN (September 9, 1912) . Pittsburgh, Pa.
JOHN WAKEFIELD WALKER (November 8, 1912) . . . Indianapolis, Ind.
JOHN S. WELCH (October 1, 1910) . . . . . Salt Lake City, Utah
ROBERT GUY YOUNG (June 23, 1912) . . . . . Victor, Mont.

JOURNAL OF PROCEEDINGS

OF THE

FIFTIETH ANNUAL MEETING

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

CHICAGO, ILL., JULY 6–12, 1912

EDUCATIONAL SUNDAY

In accordance with an established custom, Sunday, July 7, was observed as Educational Sunday by a large number of the churches of Chicago, on which date the respective pastors held special services, preaching sermons on educational topics as follows. All services were held in the forenoon unless otherwise stated.

"Christian Teaching in the Public Schools"—Rev. William Otis Waters, Grace Church (Episcopal), Wabash avenue and 15th street.

"The Value of Brains"—Rev. James O. May, Park Avenue Methodist Episcopal Church, Park avenue and Robey street.

"Education: What Is It?"—Rev. A. H. W. Anderson, All Saints Church (Episcopal), Wilson avenue and North Hermitage avenue.

"Education Which Educates"—Rev. W. Hanson Pulsford, First Unitarian Society, Woodlawn avenue and 57th street.

"The Function of Education in a Democracy"—Rev. James S. Ainslie, D.D., North Shore Congregational Church, Sheridan road and Wilson avenue.

"Education for the Life Here and Hereafter"—Rev. E. J. E. Schreck, Sheridan Road Church of the New Jerusalem (Swedenborgian), 910 Sheridan road, near Rokeby street.

"Education and Religion"—Rev. Edwin J. Randall, St. Barnabas Church (Episcopal), 4237–41 Washington boulevard.

"Education as a Means of Grace"—Rev. William Carson Shaw, St. Peter's Episcopal Church, Belmont and Evanston avenues.

"Education, the Highway to Nobler Life"—Rev. John Bradford Pengelly, St. Edmund's Episcopal Church, 5831 Indiana avenue.

"The Liberating Power of Education"—Rev. Walter S. Pond, Holy Trinity Church (Episcopal), 4716 Union avenue.

"The Educational Value of Religion"—Rev. Edward Scribner Ames, Hyde Park Church of Disciples, 57th street and Lexington avenue.

"True Education, Its Object and Its End"—Rev. George M. Babcock, Calvary Episcopal Church, 3160–62 West Monroe street, near Kedzie avenue.

"How Can the Church and Public School Work Together in Moral Training?"—Rev. William Chalmers Covert, Forty-first Street Presbyterian Church, corner 41st street and Grand boulevard.

"The Final Aim of Education"—Rev. P. O. Bersell, Grace Evangelical Lutheran Church, 70th street and Union avenue.

"Education and Religion"—Rev. E. F. Williams, Wellington Avenue Congregational Church, Wellington avenue, near Evanston avenue.

"Some Standards in Education"—Rev. Walter C. Davis, Holy Trinity Church (English Lutheran), La Salle avenue and Elm street.

"In What Way Can Public Education Be Moral and Religious?"—Rev. Edward Harvey Curtis, Woodlawn Park Presbyterian Church, 64th street and Kimbark avenue.

"The Value of Education"—Rev. Henry Edward Rompel, Centenary Methodist Episcopal Church, West Monroe street, between Morgan and Aberdeen streets.

"The Higher Ministries of Education"—Rev. H. Irving Parrott, Windsor Park Congregational Church, Marquette avenue and 77th street.

"Christian Education"—Rev. H. W. Schniewind, Saint Bartholomew's American Catholic Church, Stewart avenue and North Normal parkway, Englewood.

"Christian Ideals of Education"—Rev. Frederick J. Bate, the Church of the Redeemer (Episcopal), Washington avenue and 56th street.

"The Relation of Education to Christianity"—Rev. Howard Adams Lepper, Trinity Reformed Episcopal Church of Englewood, 70th street and Yale avenue.

"Pragmatism in School and Church"—Rev. Martin J. Magor, McCabe Memorial Methodist Episcopal Church, Washington avenue and 54th street.

"Our Schools and Our Republic" (evening)—Rev. Olin Mason Caward, Normal Park Presbyterian Church, 71st street and Yale avenue.

"The Relation of the Church to the Cause of Education"—Rev. C. R. W. Kegley, Lutheran Church of the Epiphany, 2227 Ogden avenue, near Taylor street.

"Democracy and Education"—Rev. Oscar C. Helming, University Congregational Church, Madison avenue and 56th street.

"The Master Teacher"—Rev. O. F. Jordan, Evanston Christian Church (Disciples of Christ), Maple avenue and Greenleaf street.

"Education in Religion"—Rev. Vaughan Dabney, Douglas Park Church of Christ (Disciples), 19th street and Spaulding avenue.

"The Spiritual Element in Education"—Rev. Louis Rich, Humboldt Park Parish Church (Swedenborgian), California avenue and Le Moyne street.

"Knowledge of Life, the Supreme Knowledge of God"—Rev. LeRoy Moore, Unity Society of Chicago, 204 LeMoyne building, 27 East Randolph street.

"Education and Character"—Rev. William E. Barton, D.D., First Congregational Church of Oak Park, Lake street and Kenilworth avenue.

"The Three H's in Education"—Rev. A. Eugene Bartlett, Church of the Redeemer (Universalist), Robey street and Warren avenue.

"The City's Obligation to Childhood"—Rev. Myron E. Adams, First Baptist Church, South Park avenue and 31st street.

"Secular and Religious Education"—Rev. Annesley Thomas Young, Advent Church (Episcopal), Logan boulevard and North Francisco avenue.

"Christian Education"—Rev. Peter J. O'Callaghan, St. Mary's Church (Catholic), Wabash avenue and Eldridge place.

"Christian Education"—Professor Frank G. Ward, South Congregational Church, Drexel boulevard and 40th street.

"Education and the Moral Ideal"—Rev. Paul Jordan Smith, Chicago Lawn Congregational Church, 62d place and St. Louis avenue.

"Educational Ideals"—Rev. Preston Bradley, Church of Providence (Presbyterian), 3526 Sheffield avenue, near Clark street.

"Education and Social Service"—Rev. Ozora S. Davis, New First Congregational Church, Ashland and Washington boulevards.

"Education and National Progress"—Rev. E. LeRoy Dakin, Memorial Church of Christ (Baptist and Disciples), Oakwood boulevard near Cottage Grove avenue.

"Education in Worship"—Rev. Herbert W. Prince, St. Paul's Protestant Episcopal Church, Madison avenue and 50th street.

"The Moral Aspect of Education"—Rev. Theodore G. Soares, University of Chicago, Hyde Park Baptist Church, Woodlawn avenue and 56th street.

"The Church's Relation to Public Education"—The Very Rev. Walter Taylor Sumner, Cathedral SS. Peter and Paul (Episcopal), Washington boulevard and Peoria street.

"The Coming Race: The Esoteric and Psychic Value of Education"—Rev. Alexander J. McIvor-Tyndall, Advanced New Thought Church, Hall 901, Masonic Temple.

"Some Features of Education Frequently Overlooked"—Rev. Charles Herbert Young, Christ Church (Episcopal), 65th street and Woodlawn avenue.

"What Education Is Worth Most?"—Rev. Will F. Shaw, Church of Christ, Sheffield avenue and George street.

"The Church and the School"—Rev. John D. Hull, Metropolitan Church of Christ, Van Buren and Leavitt streets.

"The American Common School"—Rt. Rev. Samuel Fallows, D.D., St. Paul's Reformed Episcopal Church, Adams street and Winchester avenue.

Lexington Avenue Baptist Church, 62d street and Lexington avenue—Rev. Melbourne P. Boynton, pastor. Sermon on educational topic.

Eglise Evangelique Francaise (Methodist Episcopal), 37th street and Langley avenue—Two addresses on "Education" in the French language. Rev. Arthur L. Allais, Rev. N. W. Deveneau, pastors.

St. Simon's Church (Episcopal), 1151 Leland avenue—Rev. W. B. Gwyn, pastor. Sermon on educational topic.

Trinity Episcopal Church, Michigan avenue and 26th street—Rev. John Moore McGann, pastor. Sermon on educational topic.

Church of the Epiphany (Episcopal), Ashland boulevard and Adams street—Rev. Franklyn Cole Sherman, rector. Sermon on educational topic.

FIRST DAY'S PROCEEDINGS

Opening Session—Monday Afternoon, July 8, 2:30 o'clock

The Fiftieth Annual Convention of the National Education Association was opened in the Auditorium Theater at Chicago, Ill., at 2:30 P.M. on July 8.

The opening was preceded by an organ recital, from 2:00 to 2:30 P.M., by Walter Spry, organist.

Grand Fantaisie in C	*Tours*
The Answer	*Wolstenhomle*
Spring Song	*Mendelssohn*
Star Spangled Banner	*Dudley Buck*
Träumerei	*Schumann*
Postlude in F	*John West*

President Harry Pratt Judson, of the University of Chicago, presided at the opening of this session.

Invocation.

Chairman Judson then introduced the following, who delivered addresses of welcome: Harry A. Wheeler, president of the Chamber of Commerce of the United States of America and former president of the Chicago Association of Commerce; and Francis G. Blair, state superintendent of public instruction, Springfield, Ill.

A response to the addresses of welcome was made by Thomas H. Harris, state superintendent of education for Louisiana, Baton Rouge, La.

Following the addresses of welcome and the response Chairman Judson introduced to the audience Carroll G. Pearse, of Milwaukee, Wis., president of the National Education Association, and transferred to him the conduct of the convention.

At this point President Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., delivered the presidential address of the year.

Following the presidential address, President Pearse introduced the following speakers, who delivered addresses appropriate to the topic of the session, "The Half-Century Mark."

1. "Brief Historical Sketch of the First Teachers Association held in Chicago, Ill."—Josiah Little Pickard, LL.D., Cupertino, Cal. (read by Oliver S. Westcott, principal of Waller High School, Chicago, Ill.).
2. "The Rebirth of the Association in 1884"—Thomas W. Bicknell, Providence, R.I., president of the National Education Association in 1884.
3. "The Ideals of Half a Century"—Jacques W. Redway, Mount Vernon, N.Y.
4. "The Monuments: the Achievements of Fifty Years"—James M. Greenwood, superintendent of schools, Kansas City, Mo.
5. "The Coming Half-Century"—Ellen C. Sabin, president of Milwaukee-Downer College, Milwaukee, Wis.

The following Committee on Resolutions was announced by President Pearse:

COMMITTEE ON RESOLUTIONS

James W. Crabtree, of Wisconsin, *Chairman*

William M. Vance, of Ohio	William M. Davidson, of the District of Columbia
Florence Holbrook, of Illinois	Mary A. Monroe, of Washington
Robert J. Fuller, of Massachusetts	John W. Olsen, of Minnesota

Following the appointment of the Committee on Resolutions the convention adjourned to Tuesday morning, the active members of the Association reassembling by states either in sections of the Auditorium Theater or at their respective state headquarters for the selection of members of the nominating committee.

SECOND DAY'S PROCEEDINGS

SECOND SESSION—TUESDAY FORENOON, JULY 9, 9:30 O'CLOCK

The following musical program was presented from 8:45 to 9:30 A.M. by 1,400 children of the Chicago elementary schools:

1. Grand Chorus: American Hymn . . . . . *Keller*
2. (*a*) The Two Grenadiers . . . . . *Robert Schumann*
   (*b*) One Summer Morn . . . . . *Goetz*

Otis School. MISS STARRY CAROL, leader

3. Grand Chorus: (*a*) Patriot's Prayer . . . . . *Edward Grieg*
   (*b*) Cradle Song . . . . . *Wm. Taubert*
4. (*a*) Barcarolle (from "Tales of Hoffman") . . . . . *J. Offenbach*
   (*b*) Slumber Song of the River (from "Jocelyn") . . . . . *B. Godard*

Farren School. MISS ELIZABETH M. BLISH, leader

5. Grand Chorus: (*a*) God Ever Glorious . . . . . *Alex. Lwoff*
   (*b*) A Merry Life . . . . . *Denza*
6. (*a*) From a Railway Carriage . . . . . *Henry K. Hadley*
   (*b*) The Night Wind . . . . . *Henry K. Hadley*

Yates School. MISS ALMA HUNNENAN, leader

7. Grand Chorus: (*a*) The Song of a Thousand Years . . *Henry C. Work*
   (*b*) Star Spangled Banner . . . . . *Smith*

AGNES C. HEATH, Director
RALPH M. GERBER, Organ
LILLIAN F. ARCHIBALD, Piano
ELSIE M. HEATH, Piano

The convention was called to order at 9:30 A.M.

The topic of the session was "The American High School," and papers on this topic were presented as follows:

1. "Its Relations to the Schools Below"—Walter R. Siders, superintendent of schools, Pocatello, Idaho.
2. "Mortality in the Early Years: Some Administrative Remedies"—Adelaide Steele Baylor, assistant state superintendent of public instruction, Indianapolis, Ind.
3. "The Specialized or Vocational vs. the Composite High School"—Arthur Deerin Call,[1] principal of Henry Barnard School, Hartford, Conn.
4. "Social Organization in the High School"—Milton C. Potter, superintendent of schools, St. Paul, Minn.
5. "What the Public May Expect in Dividends: Material, Civic, and Social"—Kate Upson Clark, Brooklyn, N.Y.
6. "The Worship of The "Standard"—William Hughes Mearns, School of Pedagogy, Philadelphia, Pa.

The convention then adjourned to 8:00 P.M., on Tuesday evening.

THIRD SESSION—TUESDAY EVENING, JULY 9, 8:00 O'CLOCK

Preliminary to the opening of the session, Marcus Kellerman, of the Royal Opera House, Berlin, Germany, presented "Musical Interpretations" on the organ.

The convention was called to order by President Pearse at 8:00 o'clock, and the following program was presented on the topic of "A National University":

1. "The National Association of State Universities and the National University"—Edmund J. James, president of University of Illinois, Champaign, Ill.
2. "A National University, a National Asset; an Instrumentality for Advanced Research"—Charles R. Van Hise, president of University of Wisconsin, Madison, Wis.
3. "A National University as Related to Democracy"—James H. Baker, president of University of Colorado, Boulder, Colo.
4. "Ways and Means: the Next Steps"—William O. Thompson, president of Ohio State University, Columbus, Ohio.

After the close of the program, President Pearse announced the following Committee on Nominations:

[1] Now executive director, American Peace Society, Washington, D.C.

COMMITTEE ON NOMINATIONS

Robert J. Aley, of Maine, *Chairman*

C. C. Thach.....Alabama	G. W. A. Luckey.....Nebraska
Henry Q. Robertson....Arizona	W. J. Hunting.....Nevada
George B. Cook.....Arkansas	J. H. Fassett.....New Hampshire
Agnes Howe.....California	E. A. Farrington.....New Jersey
James H. Baker.....Colorado	R. H. Twining.....New Mexico
Arthur D. Call.....Connecticut	Katherine D. Blake..New York
(No appointment).....Delaware	James Y. Joyner.....North Carolina
William M. Davidson...Dist. of Col.	Charles C. Root.....North Dakota
I. I. Himes.....Florida	Edward M. Van Cleve Ohio
J. H. Guilliams.....Georgia	Edwin S. Monroe.....Oklahoma
Walter R. Siders.....Idaho	W. J. Kerr.....Oregon
William B. Owen.....Illinois	J. George Becht.....Pennsylvania
Linnaeus N. Hines.....Indiana	Mary Mugan.....Rhode Island
J. H. Beveridge.....Iowa	David B. Johnson.....South Carolina
M. E. Pearson.....Kansas	A. A. McDonald.....South Dakota
McHenry Rhoads.....Kentucky	L. E. Wolfe.....Tennessee
Thomas D. Boyd.....Louisiana	C. J. Lukin.....Texas
Robert J. Aley.....Maine	D. H. Christensen....Utah
Martha Stromberg.....Maryland	Guy Potter Benton..Vermont
Frederic Goodwin.....Massachusetts	(No appointment).....Virginia
E. A. Lyman.....Michigan	T. E. Hulse.....Washington
Florence Rood.....Minnesota	J. F. Marsh.....West Virginia
James W. Bell.....Mississippi	Margaret Canty.....Wisconsin
John R. Kirk.....Missouri	(No appointment).....Hawaii
W. E. Harmon.....Montana	George N. Briggs....Phil. Islands

THIRD DAY'S PROCEEDINGS

Fourth Session—Wednesday Evening, July 10, 8:00 o'clock

Preceding the opening of the session an organ recital was given by Arthur Dunham, organist, from 7:30 to 8:00 P.M., the following program being presented:

Chorale and Minuet	*Boellman*
Elevation (on the echo organ)	*Rousseau*
Burlesca e Melodia	*Baldwin*
Berceuse (from "Jocelyn")	*Godard*
Fanfare—Concert Étude	*Shelley*
Coronation March	*Meyerbeer*

The convention was called to order at 8:00 P.M. by President Pearse, who introduced the following speakers on the general topic, "The Relation of the Public Schools to the Movement for Recreational, Social, and Civic Opportunity":

1. "The Schoolhouse as a Social and Civic Center"—Frank P. Walsh, Kansas City, Mo.
2. "How a Community May Find Out and Plan for Its Recreational Needs"—Rowland Haynes, field representative, Playground and Recreation Association of America, New York, N.Y.
3. "The Relation of Schoolhouse Architecture to the Social Center Movement"—Dwight H. Perkins, Chicago, Ill.
4. "The Public Library, the Public School, and the Social Center Movement"—Arthur E. Bostwick, librarian, Public Library, St. Louis, Mo.
5. "The Organization and Administration of Recreation and Social Center Work"—Erich C. Stern, member of state legislature, Milwaukee, Wis.
6. "The School as a Recreation Center"—Jane Addams, head resident, Hull House, Chicago, Ill.
7. "The Social Center and the Rural Community"—Herbert Quick, editor of *Farm and Fireside*, Springfield, Ohio.

The convention then adjourned to Thursday evening, July 11.

FOURTH DAY'S PROCEEDINGS

Fifth Session—Thursday Evening, July 11, 8:00 o'clock

Preceding the opening of the convention, an organ recital was given by Arthur Dunham, organist, from 7:30 to 8:00 P.M., the following program being presented:

Concert Fantasy in C minor	*Batiste*
Prayer and Cradle Song (on the echo organ)	*Guilmant*
Wedding March	*Guilmant*
March from the Opera "Queen of Sheba"	*Gounod*
Capriccio	*Lemaigre*
Grand Chorus in G minor	*Hollins*

President Pearse called the convention to order at 8:00 o'clock and presented the following speakers on the general topic, "The Public Schools and the Public Health":

1. "The Duty of the State in the Medical Inspection of Schools; Results Which the Public May Rightfully Expect"—Fletcher B. Dresslar, specialist in school hygiene, Bureau of Education, Washington, D.C.
2. "The Teaching of Personal Hygiene in the Schools"—David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.
3. "Sanitary Education in Rural Communities"—Charles E. North, M.D., New York, N.Y.
4. "Medical Inspection and Medical Freedom"—Charles A. L. Reed, M.D., Cincinnati, Ohio.
5. "Some Problems in Education, as Related to the Public Health"—Harvey W. Wiley, contributing editor and director of Bureau of Foods and Health, *Good Housekeeping Magazine*, Washington, D.C.

The convention then adjourned to Friday forenoon, July 12.

FIFTH DAY'S PROCEEDINGS

Sixth Session—Friday Forenoon, July 12, 9:30 o'clock

President Pearse called the convention to order at 9:30 o'clock and presented the following speakers on the general topic, "Rural Life Conditions and Rural Education":

1. "A Social and Educational Survey of the Rural Community"—Warren H. Wilson, superintendent of the Presbyterian Department of Church and Country Life, New York, N.Y.
2. "What Is Being Done to Meet the Problem":
   - *a*) "By the Schools of Guilford County, North Carolina"—T. R. Foust, county superintendent, Greensboro, N.C.
   - *b*) "By the State of Oregon"—L. R. Alderman, state superintendent of public instruction, Salem, Ore.
   - *c*) "By the State of North Dakota"—John H. Worst, president of State Agricultural College and Government Experiment Station, Agricultural College, N.Dak.
3. "The Humanity of Highways"—Mrs. Frank DeGarmo, director of Country Life Department, National Congress of Mothers, St. Louis, Mo.
4. "The School, the College, and the English Farmer"—E. J. Russell, director of Rothamsted Experimental Station, Harpenden, England.
5. "What the National Government Can Do"—Philander P. Claxton, United States commissioner of education, Washington, D.C.

The convention then adjourned to Friday evening, July 12.

Seventh Session—Friday Evening, July 12, 8:00 o'clock

Preliminary to the opening of the session, Arthur Dunham, organist, presented the following musical program:

Bell Rondo	*Morandi*
Andantino in D flat (on the echo organ)	*Lemare*
Toccata in G	*Dubois*
Overture to "Tancredi"	*Rossini*
Song without Words	*Tschaikowski*
March from "Tannhäuser"	*Wagner*

The convention was called to order by President Pearse at 8:00 o'clock, and the following program was presented:

1. "The Best Next Thing for the Teaching Profession"—Albert E. Winship, editor of *Journal of Education*, Boston, Mass.
2. "Peace and Arbitration"—Baroness Bertha von Suttner, Vienna, Austria.
3. "Camp-Fire Girls"—Gerda Sebbelov, general secretary of the Camp-Fire Girls, New York, N.Y.
4. "The Camp-Fire Girls and the New Relation of Women to the World"—Luther Halsey Gulick, director of Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

Following the address of Director Gulick, President Pearse introduced Mrs. Ella Flagg Young, superintendent of schools of Chicago, who spoke briefly, thanking the members of the Association for their attendance and contributions to the success of the Fiftieth Convention of the National Education Association.

President Pearse then introduced Hon. Edward T. Fairchild, president-elect of the National Education Association.

Mr. Fairchild responded in a brief address of thanks for the honor which had been bestowed upon him, pledging his devotion to the interests of the National Education Association intrusted to him, as follows:

In behalf of this Association I wish to thank you, Mr. President, for the helpful, instructive, and inspiring program provided. Permit me also to congratulate you upon the eminently fair and just manner in which you have discharged your duties as presiding officer.

To you, ladies and gentlemen, members of the National Education Association, I wish to express my sincere appreciation of the great honor you have conferred upon me. For twenty-seven years my name has been borne upon the roll of this organization as a life member. I have read with interest its proceedings and have gone to its reports as to "a court of last resort." For me the deliberations and conclusions of the National Education Association have been a constant source of guidance and inspiration. Its roster of fifty years carries the names of America's greatest educators. Its influence for good is immeasurable. Such is its past history. As for the future, may it meet fully the newer and greater demands. May it continue to be the most powerful instrument in the world for the development of the highest and best in national life and character; for the establishment of equal educational opportunity!

For myself, I believe in a progressivism that holds fast to all that is good and forsakes all that is evil; that seeks not to destroy, but to upbuild; that attempts to meet twentieth-century demands by applying twentieth-century methods.

May I propose this sentiment: The teachers of the United States. May they ever continue to be loyal, patriotic, God-fearing men and women, devoted to the great work of inspiring our youth with high ideals and lofty purposes; and may they ever be so consecrated with the spirit of unselfish devotion to the great work of teaching that only good examples shall be set. May they grow in grace and kindliness of spirit and may still higher purposes and nobler aspirations fill their hearts and minds to the exclusion of all lesser things.

To this body of kingly citizens, and citizen kings, all hail!

President Carroll G. Pearse, after brief remarks of cordial thanks to all members of the Association for co-operation during the year just over, invited the Association to join in singing "America" as the closing exercise of the Fiftieth Convention of the National Education Association.

IRWIN SHEPARD, *Secretary*

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESS OF WELCOME

HON. FRANCIS G. BLAIR, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION FOR ILLINOIS, SPRINGFIELD, ILL.

Plato in accounting for the existence of organic life assumed the existence of two antecedent worlds: one, a world of ideas placed by him somewhat indefinitely in the heavens; the other, a dead inert world of matter. In his world of idealism he placed an idea for every species of living thing. In the fullness of time that idea exerts a miraculous power upon the nether world of matter until

> Every clod seems to feel a stir of might,
> An instinct within it that reaches and towers
> And groping blindly above it for light,
> Climbs to a soul in grass and flowers.

Plato believed that matter was shaped into forms of loveliness and beauty thru the influence of a spiritual thing—an idea. Of course, with our modern scientific thought and experiment, we have outgrown Plato's fancy as a sufficient explanation of the origin of the animate world. Our modern materialistic philosophers go quite to the other extreme. They would have us believe that everything is the product of the blind forces of nature. If we understand clearly their inductions, they hold that man, the highest form of life, is physically, mentally, and morally the direct result of the flux and flow of great natural forces which have played upon him from the very beginning, whatever that beginning may have been. His physical form, the shape of his head, the color of his eye, the color of his hair, the hue of his skin, all his physical attributes are the direct effects of wind and wave, of mountain and valley, of heat and cold, of moisture and dryness. And such an array of evidence is brought forward that every one of us must be willing to admit the strength of the argument. But they go still farther and hold forth that the intellectual powers of man are also the result of these same physiographic forces. If man is born in the region of the poles, where the nights and winters are long, where there is very little variety of plant and animal life, his mind is dwarfed. And under the opposite physical conditions on the arid stretches of the torrid zones, intellectual mediocrity is the result. It is only in the great temperate zones, with their rhythm of night and day, of spring and summer and winter, with their great variety of animal and vegetable life, with their pageants of bud and blossom and fruit, that man attains his highest intellectual power and his greatest variety of imagination. Still farther they go, and assert that in his institutional and religious thought and life he

is a creature of these same material forces; that out of the great womb of nature he springs; that he is fashioned completely by her and unto her in the end he returns again to become "a brother to the insensible clod."

After granting much of this array of facts and inductions, after admitting that man is influenced very greatly physically, mentally, and morally by the earth forces that play upon him—after granting all that—we must not forget, and we must continue to state that one of the most forming and transforming forces that plays upon him is not a physical force but a spiritual force. We cannot for a moment admit that the sum-total of man's environment consists of mountains and streams, winds and weather, and mere physical forces. We must not overlook the fact that the most potent part of his environment may be an idea, a sentiment, an enthusiasm. Take the great idea of service which was slowly evolved thru the Hebrew nation and perfected in the life of the Great Master. When it was once liberated, how it swept around the world, changing the thought, the sentiment, and the life of the people. How it entered into the hearts and minds of men and women and changed their attitudes toward themselves and toward each other. How it entered into the home and gave it its most sacred touch. How it entered the imaginations of men and women and changed the form of their literary expression so that every page glowed with a fervor and a beauty never known before. How it leaped into the paint and brush of the painter and made his canvas blaze forth with a new intensity and power. How it touched the heart of the architect and was bodied forth in lofty spires and magnificent cathedrals. How it caught the arm of the sculptor and in hammered brass and carved stone brought forth new forms of loveliness and beauty. How it changed constitutions and laws and federations. How it took men and women born under vastly different physiographic conditions, whose ancestors for centuries had lived under these dissimilar conditions, and by giving them a new birth thru this idea transformed them into a unity of faith, a unity of spirit, and a unity of conduct.

Yes, let science continue to explore the world of nature and let us honestly accept every finding that is true, but let us not lose our faith in the power of an idea. And it is because you, the teachers of America, represent that world of ideas and hold it above this world of industrialism and materialism; it is because you believe that boys and girls are not transformed into men and women merely by what they eat or by mere physical forces, but that their tastes, temperaments, habits of thought, and their characters are shaped by a body of ideas, a body of sentiments, a body of enthusiasm; it is because you are the keepers of the holy grail of truth, because you are the knights-errant of ideas and ideals, that we welcome you to this great metropolis of the Middle West and to this great commonwealth which lies at the very heart of the nation. Geographically, Illinois is a part of the entire nation. When Nathaniel Pope, the terri-

torial delegate to Congress, asked that body to extend the territory of the state up to the western shore of Lake Michigan, far beyond the limit set by the conditions of the Northwestern Ordinance, he was asked to state his reason. In substance he replied: "You have fears that the day will come when the North and the South will separate. You also fear that with the development of the great territory beyond the Mississippi the commonwealths there formed will be out of spiritual contact and sympathy with the East and will tend to fall away. If you will give the territorial limits to this state which I am asking, letting it reach to the far North and down to the very heart of the Southland, you will make a state that will bind together forever the North and the South with a bond which, tho misunderstanding and passion may strain, can never be broken. You will fashion a state lying midway between the East and the West that shall hold together, in bonds of sympathy and common interests, the great nation that is yet to be." So that in a very peculiar sense Illinois, geographically, is the very heart of the nation. But there is another sense, and one that is much more significant, in which Illinois occupies a central place in the nation. Here on these stretching prairies lived and grew to maturity a man gaunt of form and large of stature, in whose heart and mind was a world of ideas and sentiments nation-wide in their scope. Here on this great western frontier with the wild forces of pioneer life playing about him he kept his feet firmly planted upon the earth, but his head was touched with the light of truth and sentiment and national idealism. He looked upon the North and the South, upon the East and the West, and in the great womb of his heart, thru much travail and pain, we were all born into a new citizenship. And it is with peculiar pride that, as a citizen and an official of this commonwealth, I invite you to enter into it thru the heart and mind and life of Abraham Lincoln, who believed in nature, who believed in material forces, who believed in great industrial activity, but who believed that an idea, a principle, was above and over them all as a shaping, forming influence upon the lives of men.

RESPONSE TO ADDRESS OF WELCOME

HON. THOMAS H. HARRIS, STATE SUPERINTENDENT OF EDUCATION FOR LOUISIANA, BATON ROUGE, LA.

As spokesman for the visitors assembled here, I desire to express grateful appreciation of the kindly welcome which has just been extended by the state superintendent of Illinois, Hon. Francis G. Blair.

Chicago is a fitting place for teachers to assemble for the discussion and solution of their problems. Its public-school system, headed by one of the wisest and most progressive superintendents in the country, has settled many of the questions that are annoying some of us; its great university is blazing a clear and sane way in the field of higher education; and its

progressive commercial spirit is an example in thrift and organization to other cities. We have been assured that the city, with its facilities for instruction and entertainment, is ours. Availing ourselves of the kindly proffered hospitality, we shall be able to profit by the educational and industrial achievements about which we shall learn by appropriating the ideas that can be utilized in the work we are attempting at home.

Every section of the United States is represented here, and every phase of educational endeavor has in this assembly its friends who are here to promote its best interests. The President has warned me that I am not expected to say anything, and that I shall be given only a few minutes in which to say nothing; and accepting in proper spirit the limitations that hedge me in, I shall call attention to only one of the many questions that are engaging the attention of school men thruout this country at the present time, namely, the importance of utilizing the practical world about us in the education of the child.

For many years business men have believed that the schools were doing too little for the masses who work in the trades and industries, and were being conducted too largely in the interest of the few. The man who works in the shop, in the store, and on the farm has been asking why it is that a boy's education cannot be made to square with the world in which he must live and work. The schools are attempting to respond to these demands of a practical public. Some cities are organizing their schools in sympathy with the commercial and industrial conditions that exist in them, and while the rural portions of the country are always the last to receive intelligent attention, yet here and there a country school is organized to serve to advantage the community that supports it. School men are saying that the school campus should be a map, socially, spiritually, and industrially, of the community for whose benefit the school was created; in practice, however, we have just begun to attempt seriously to draw the map. A few city-school systems are bringing the shop, the forge, the bank, the store, and other urban industries into the schools and are successfully using them in the education of the cities' children, and a half-hearted attempt is being made in an occasional country school to modify the course of study, that was prepared a thousand years ago for preachers and lawyers, for a course designed to acquaint country boys and girls with the life and duties about them. Institutions that are based upon traditions which have come down thru the ages are slow to make changes (and rightly so), and constructive work that deserves to live permanently advances slowly, being subjected to the tests and corrections necessary to guarantee results sane in conception and correct in execution. It may be well, therefore, that we have felt our way in the matter of introducing the activities of the practical world into our school courses.

This principle of cautious procedure will not be violated now that the experimental stage has been passed by the adoption of machinery necessary

to promote such practical education as should be promoted. Sentiment in the cities can always be created in favor of any worthy educational cause, and funds can be raised for its support. There need be no special worry, therefore, over the question of shaping city-school courses to meet the needs of city people. The situation in the country is different. There the public conscience is not easily aroused, and funds for the support of needed institutions are raised with difficulty. The isolated situation of the farmer creates satisfaction with conditions that are heart-rending, and his poverty prevents him from changing the conditions even when he aspires to better things.

The country schools should be lifted from their tragical position and organized to serve to better purpose the millions of country people who constitute our most important industrial class. This can be done only thru the leadership and financial assistance of forces outside of the rural sections. At the head of these forces should be the United States government. Congress should aid the states thru the state colleges and normal schools to train teachers for proper service in the country schools, and it should assist in the organization and maintenance of country schools in all of the states that approach the ideal of offering instruction suited to the needs of country conditions. Millions spent annually in this way with the view to making a better citizen of the man in the country would prove one of the most valuable investments the national government has ever made. The question of national interference with the state systems of public schools is unworthy of consideration. Such national supervision as would be necessary to insure the wise expenditure of national funds could be exercised by the national Department of Education, not only without doing violence to the spirit of local school government, but to the uplift of local educational ideals. This has been true of the agricultural and mechanical colleges, and it would be true of the country schools.

Thru the leadership and financial assistance of the national government, the extension departments of the state colleges are performing a wonderful service in certain departments of public-school work in many sections of the country; an extraneous stimulus has accomplished even greater results in the field of secondary education, and all this without encroaching upon local authority.

The greatest question before the American people today is the creation of a country school that can properly educate the millions of our country population. Our national industrial prosperity and the perpetuity of our democratic institutions depend upon an intelligent, efficient rural citizenship, and to the realization of that ideal the national government should contribute leadership and millions of its funds.

If the teachers of the United States, representing all departments of public-school effort—colleges, state normal schools, high and elementary schools—would unite upon a sane, broad program, and present to Congress

an earnest, nation-wide appeal for the country school, Congress would respond to the appeal, and a stimulus would be provided for the removal of the lowly, tragical, heart-rending conditions that surround the children in the rural districts of this country.

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.; PRESIDENT OF THE NATIONAL EDUCATION ASSOCIATION

Our public educational system stands in the presence of great impending changes. It is becoming yearly more certain that a radical readjustment of our conception of public-school education, its province, its methods, its details of administration, is demanded by the conditions of the day.

The curriculum of the public schools was shaped when a comparatively small part of the education of children was given at school; to read, to write, to compute in a simple way—these were the arts taught. Habits of industry and application to practical affairs were acquired at home; in connection with these lessons in industry, children got from their parents lessons in honesty and truthfulness; they learned to feel that obligation which a good citizen owes to his family, to his neighbor, to the organized community, and to the state. The home and the church had a large part in the work of education; requirements comparatively much lighter were laid upon the school.

The educated leaders among our early settlers, who shaped our standards of education, had, in addition to the education in the homely things of life which was assumed as a matter of course, a large knowledge of the wisdom set down in books. Their grammar schools and academies, designed to fit boys for the college, and the college itself took on almost exclusively the ideals of book learning.

When Horace Mann preached his crusade of education for all the people it was this ideal which moved him; all the youths of the land were to be given the education in books which was in accord with the ideas of the educated men of that day. And the high schools, which everywhere sprang up, were planned to cover only that portion of the circle of education which was deemed within their province at a time when a large part of the circle was covered by the activities of the home. The education of the nation today is still largely in the mold which was shaped by the conditions and influences prevailing in its formative days; the subjects thought worthy of study in the schools of the people have been until recently, and in thousands of schools still are, those which were proper under industrial and social conditions which have passed away.

The schools are still using a daily time schedule shaped by conditions which, so far as our cities and towns are concerned, no longer exist. The arrangement by which the schools opened in the morning at nine o'clock and closed in the afternoon at four o'clock, with an hour at noon for the luncheon which in most cases was brought from home and eaten at the school, was not accidental; it had a real economic reason, based on the industrial conditions in the homes. The nine-o'clock opening, an hour or more later than the German boy begins his schools tasks, served to allow all the children who were above babyhood to help in the morning about the farmyard "chores" and the household tasks. The four-o'clock dismissal in the afternoon not only permitted all the children to reach home before dark, tho the distance might be considerable, but permitted them time to assist in performing the evening farmyard and household duties: out of doors, to feed and house the farm animals, attend to the milking, and see that the wood was brought; indoors, to help with the supper and be busy with the tasks which had accumulated during the day.

Our universal weekly time-table bears the marks of a similar origin. Abroad, it is common to find the week broken by a midweek and a week end—a Wednesday afternoon and a Saturday afternoon—half-holiday. With us, the schools are dismissed and the schoolhouse bell is silent thruout all of Saturday. Our New England ancestors, from whom we have inherited most of the details of our school system, were a Sabbath-observing people. The work to be done on that day was reduced to a minimum. Saturday not only brought the necessity for clearing off the arrears of the week, but all possible preparation must be made for the day of rest which was to follow. This service kept busy all the hands, the small ones of the family as well as those larger and stronger.

In the yearly arrangement of terms and vacations the same shaping influences can be seen. It is true that energy is not so abounding in the heated season and it might, at first thought, be supposed that this offered an explanation for the long summer vacation. But it will be remembered that the work of field and farmhouse never intermitted on account of hot weather and that the most strenuous farm work was done during the summer. In the seasonal necessities of an agricultural community will be found the real cause for the long summer vacation. Keeping the weeds out of the corn and potatoes during the season of their most rapid growth; the haying and harvesting; the care of the kitchen garden; the gathering of vegetables and fruits and preserving them for winter use—all these filled busy hands thru the hours of long summer days with labors which must be performed at just the time set by the succeeding necessities of growth and ripening. And so, from early summer to early autumn, the schoolhouse door was closed and dust gathered on the books, while the pupils, merged in the industrial community, were receiving industrio-vocational education of a purposeful and practical quality which falls to the lot of too few of the boys and girls of today.

The part borne by the home in the education of our children, to fit them for usefulness and give them power, has shrunk like a snowbank in spring; the industrial and social conditions, in our cities and towns, at least, are such that the stream of home educational efficiency, once flowing strong and full, has become a mere trickle.

The old system had many defects; its teachers were too often poor in skill and in knowledge; its appliances were crude; its organization was rudimentary. But the home and life were its powerful allies; and much of its product was far beyond what the school alone could have shown. We who are charged with the responsibility for public education stand confronted by the necessity of bringing back the schools into touch with life; it is required of us that we cease to try to educate the children of the people in institutions shaped to meet conditions which existed among us two or three generations ago.

Altho in general, to date, least effort toward readjustment has been made in the rural schools, the situation there is simplest and easiest to solve. There still remains the opportunity for co-operation with the home; there, useful labor, under wholesome conditions in company with father and mother, is available as an aid to build strong muscles and nerves and vital organs, to train to application and industry, and to give the power to bear responsibility creditably and meet emergencies with self-reliance. Much still remains to be done in the consolidation of the scattered small schools into larger ones, where better equipment and classification are possible and where better teachers can be paid for. Something remains, also, to be done by way of enriching the curriculum and bringing into it, not only more of the culture of the past and the wisdom of the world today, but also such applications of our scientific and commercial and social knowledge to the practical affairs of rural life as shall make for larger returns from the soil, and its betterment rather then its exhaustion; a higher quality of live stock and live-stock products; a clearer understanding of the best methods of marketing crops and purchasing supplies and equipment, as well as more intelligence in keeping farm accounts and showing profits or losses; and a truer understanding of the value and possibilities which the rural home offers for social life and recreation.

The problem of "bringing back" the city school is, however, more difficult. Already something has been done to recast the course of studies in the light of present-day demands. Numbers of schools have introduced physical training to help in straightening stooped shoulders, developing flabby muscles, giving a good carriage in standing or walking, and developing muscular control and steadiness of nerve. But far more needs to be done; the few exercises possible in the small time now available can only start the good work. More exercise of definite sort must be given to develop poise and control; but far more out-of-door exercise must be allowed for increasing general vigor and vivacity. A powerful

agency for this will be found in the sports and games in which all normal young persons delight. Not only must time be allowed for these, and, where necessary, supervision and suggestion or direction provided, but adequate play space must be put at the disposal of the young people of the school, both during school time and at other hours. The school grounds should be the neighborhood center for play and sports, summer and winter. From these playing-fields it will not be wise to exclude those games and forms of sport which involve contest—struggle, either personal or between teams. Some of the most virile and valuable qualities of the race have been developed by struggle; if these qualities are not to fail from among us, some place must be provided where all the young people, not merely a small number picked for athletic prowess, may have a chance to develop those qualities.

In many places efforts have been made, in some instances feeble, in others well considered and effective, to provide some exercises which shall give to pupils some of that touch with real things, that knowledge of how to do things with the hands, that development of nerve tracts and nerve quality, and of brain areas and general brain power, that, to thousands in the past, came from work in the field and the forest, in the barn and the shop, in the kitchen garden and at the loom, at the wash tub and the wood pile. Whittling and joinery for the boys and the sewing and cooking which girls do in many elementary schools are of real value toward the solution of this problem. The drawing and clay modeling often given furnish an opportunity for self-expression, for the creation of beautiful forms or the development and grouping of conventional forms of artistic design adapted from beautiful objects found in nature. This opportunity for expression and for the exercise of taste and skill in originating and applying designs used to come to the boy who made and decorated his sled or the piece of furniture for use in the home; or to the girl who designed the pattern and wove the linen, the rug, the carpet; who fashioned her own garments or trimmed her hat, or laid out the garden flower bed and arranged its harmony of colors. The beginnings have been good; but they are only beginnings. Two or three hours per week are grossly inadequate to develop hand skill and artistic taste, and to build up power and ability to execute. The time for this work must be extended until an hour or an hour and a half can be found each week day, instead of only an hour or an hour and a half during the week. This time will suffice to do some real work: the girl can get some real knowledge of, and some skill in, sewing and cooking and caring for the various rooms of the house, in the cutting and fitting of family garments, in caring for the sick and for little children; the boy can get better hand training; he will be able, not only to use tools, but to repair articles and have time to design things and to make them. Both boys and girls can not only get skill and knowledge, but form habits of application and effectiveness—something which the time now available does not permit;

both will have time to study the underlying principles of design and decoration and the methods of applying these to the work they do.

Less time, rather than more, will be spent on arithmetic; but more, much more, on the essential operations, to give a surer mastery and readier use of the processes which are most used and necessary. Less time will go to the study of grammar—but that time will go to a better selected list of fundamental topics; and more time, much more, will be given to oral and written expression by the boys and girls; they will have far more thoro training "to say right on," plainly, directly, and forcibly, in spoken or in written words, whatever they have to say.

When the curriculum has been reconstructed in the light of the needs of the life of our people—and not forgetting the life which awaits the youth whose formal education must end with the elementary schools because it is necessary for them to enter the great army of workers—our boys and girls will not have been taught any special employment or handicraft; the common schools are not for that. No specious plea for "pre-vocational" education will have made it possible to rob the children of their birthright in the schools of the people by selecting out those who are to be "devoted to labor" and giving to them some special training to make them more readily useful as factory workers. But every pupil coming from the schoolroom doors at the end of the elementary-school course will have had such training as will make it easily possible for him, if conditions permit, to go on into the high school, and thence to college. But if necessity calls to labor, instead of permitting further progress in school, the boy will go with hands possessed of sufficient skill to acquire expeditiously any handicraft to which he may apply himself, or, if he does not follow mechanical employment, to make it sure that he will not stand helpless in the presence of a shelf which needs to be put up, a door to be hung, or a fence to be repaired. The girl will be able to do the things that fall to the lot of a house-mother if fate calls her, as it does most women, to that duty. Both the boy and the girl will have such a grounding in the elements of arithmetic and the use of language as to be ready and well able to learn quickly the methods used in noting and recording the transactions in any place of business, and in making the computations required and extending the results.

All will have acquired some knowledge as to how the soil is prepared and seeds are planted, how plants grow and are cultivated, how the vegetables and fruits and flowers are gathered and made ready for the uses of men; they will understand the ministry of the frost and the heat, the rain and the sunshine; the blessed smell of the soil will be familiar in their nostrils, and they will know the feeling of wholesome dirt between their fingers and toes. Each will have a fair and practical knowledge of our history and the methods by which we govern ourselves and carry on the business of the general and local governments. Each will have a body as

straight and vigorous, as well schooled to control, and as sound as heredity and home conditions render possible.

It is not necessary to say that the hours devoted to school exercises, according to the daily and weekly schedule now in use, are not sufficient for these things; all of us realize it. But a school day adopted under conditions which no longer exist is not a sacred thing; there is no reason why the school day should not be lengthened and the weekly schedule modified to meet the conditions of today. The school day has even been generally shortened within a generation, largely because the general strength and the nervous systems of our children were being overtaxed by the kind of school exercises, almost exclusively interior and sedentary, which they were required to perform. But with a proper readjustment and arrangement of exercises there appears no reason why the schedule should not include the new work, and the extension of old work proposed.

More equipment for manual work and more teachers for it will render practicable the extension needed here; more time allotted to physical exercises and especially more time devoted to outdoor play and to sports and games will give what is necessary there; more land for play and sports and for planting and cultivating growing things will make it possible for the pupils to receive the education which is to be derived from these activities. And a proper rearrangement of employments, the alternation of inside work with work in the freedom of the open air, lessons in books with handwork or with work in the school garden, or with activity upon the playground, will bring children to the end of the elementary-school period, not less vigorous and healthy than at present, but rather stronger, in better health, and in every way better equipped and trained for whatever tasks life may bring them.

And in this reconstruction of the program it will probably be recognized that the Creator did not intend that entire abstention from labor should occur during the summer months; the growing season in nature may very well be the growing season for human beings, not only physically, but intellectually and in the formation of worthy habits. If school exercises are intermitted in summer in the rural schools, it should be chiefly because the pupils can have education of a different but equally valuable sort given to them otherwise. Some fortunate children in town can be taken by their parents to the country for the summer, but for most it is impossible; they must remain in the town. It should not be difficult so to arrange the school exercises of the year that this great majority of children would be far more profitably, wholesomely, and agreeably occupied than in running the streets as they too often do under present conditions.

This readjustment need not be at the expense of the teacher's strength or comfort. Doubtless the beginnings of the new order would be painful to those who had fallen into ruts, and to those who had become firmly estab-

lished in routine and mechanical habits of work; whenever any new plan is undertaken, we expect groanings from this small minority of teachers and these groanings seldom belong to that class "which cannot be uttered." But altho the school day must necessarily be lengthened, the change from indoor to outdoor conditions and the variety in the work would relax the tension and break up the continuous application to tasks so similar that they beget schoolroom fatigue. The supervision of the outdoor play and of the school-garden and field work should furnish a grateful relief, and render the work of the day much less exhausting. Of course the special work—that in manual training and household arts, and in systematic gymnastics—should be done by special teachers, and the regular teachers relieved during the time the classes are thus engaged. This would allow time in which the teacher would be free from responsibility for the class; it could be used in relaxation, or it could be used for checking up and planning school work and lessons instead of doing this work after school, or at home in the evening.

One other pressing problem demands consideration in this connection: Will the constructive exercises of the school have their full value if the product of these exercises lacks real utility? Children in the home, for ages, have taken part in the real work of life; they have produced or helped to produce articles for family consumption or for sale. Can the manual, the constructive work of the school, have the vital educative effect which is so important unless the things made in the school shop or raised in the school garden are real things, for practical use or for sale? It is not at all certain that we shall not find that this practical quality is necessary; that children must have restored to them thru the instrumentality of the school the right to work at productive labor, as a vital part of a proper education. They must be kept from grinding toil in mills and factories; but they have thrived on suitable labor, under proper conditions and oversight, since time began. It may be that this opportunity can come in connection with the school, by centering the manual work, in shop and garden, chiefly upon suitable articles having economic value—articles which can be used or sold. It may be that it can come by some arrangement between the school and the industries; and an agreement by which a considerable share of the time devoted to handwork may be employed in some suitable industrial establishment, at work of immediate, concrete commercial value. It may be in one way, it may be in another; but we must ascertain if some way cannot be found for restoring to our boys and girls their right to that education which comes from proper labor, suited to their age and strength, and performed under right conditions. We must answer the question whether important and valuable qualities of our national character do not depend for their development and perpetuation upon the restoration to our children of their right to perform suitable and useful labor during their formative years.

TOPIC: THE NATIONAL EDUCATION ASSOCIATION—THE HALF-CENTURY MARK

A. BRIEF HISTORICAL SKETCH OF THE FIRST TEACHERS ASSOCIATION HELD IN CHICAGO, ILL.

JOSIAH LITTLE PICKARD, LL.D., CUPERTINO, CAL.

(*Read by Oliver S. Westcott, Principal of Waller High School, Chicago, Ill.*)

The convention of teachers was called in October, 1846, by J. Y. Scammon, G. W. Meeker, and others interested in the cause of public education, to be held in Chicago. It was an invitation of national character, as was evident from the response to the call. New York was represented by Salem Town, author of school textbooks popular at that time; Mr. Pierce, an organizer of teachers institutes; and W. F. Phelps, a recent graduate from D. P. Page's Normal School at Albany.

Governor Slade of Vermont was at that time engaged in securing places in the West for female teachers. It was probably on his suggestion that a delegation so timed their journey as to be present at the Chicago meeting.

The homes of prominent citizens were opened for the entertainment of all in attendance from outside the city. The plan of the originators of the convention was for a three days' session. No program had been prepared, but the addresses of the gentlemen from New York elicited warm discussion, and the interest became so great that an invitation was extended to the gentlemen above named to remain and conduct a normal institute similar to those held in New York and adjoining states. The hosts cordially extended the welcome to their guests. The teachers of the city attended evening sessions, and the young ladies of the Chicago Female Seminary were often present during the day sessions. So great was the interest that for the last afternoon of the convention the public schools were closed and an outdoor meeting was held in the courthouse square, since there was no hall of sufficient size in the city to accommodate the audience.

It is impossible for me to give a detailed account of the exercises, but I may speak of the aftermath; for the seed sown in that convention has not perished, but, to my mind, is the living root which appears in the vigorous growth now harvested each year by the National Education Association.

Mr. Phelps, participant in the sowing, lived many years to witness the harvest and in 1876 presided over the reapers as president of the National Educational Association in Baltimore. He organized the State Normal School of New Jersey in 1855 and in 1857 the Farnum Preparatory School in Beverly, N.J. He was principal of Minnesota State Normal School 1864 to 1876 and president of Wisconsin State Normal School at Whitewater 1876–78. At the ripe age of eighty-six he passed away in St. Paul, Minn.

Inspired by the meetings, not one of which failed to interest me, I

returned to my home. The longing for sympathy of fellow-laborers, which had so cheered me at the Chicago convention, grew in intensity. Interest in popular education in the mining region covering a part of southwestern Wisconsin, northwestern Illinois, and central eastern Iowa was at low ebb. Thru personal correspondence the teachers of the region, anxious for better acquaintance, and for help in the work which was discouraging, met at Platteville, Wis., and before parting organized the Mining Region Teachers Association. For five years the Association met annually in one of the three states. Dr. Azel P. Ladd, a resident of the mining region, a warm friend of public education, was elected state superintendent of public instruction for Wisconsin and entered upon the duties of his office in 1852. Having witnessed the results of the Mining Region Teachers Association, he determined, if possible, to secure the organization of a state association. Pursuant to his call for a meeting of friends of such an association, seven men, four of them teachers, met at his office in Madison, August, 1853. After conference, an organization was perfected and a constitution was adopted extending the privilege of membership to all "friends of education." Provision was made for a meeting in August of each year. (Illinois followed in December, 1853, and Iowa in May, 1854.) It is presumed that the Wisconsin association was exceptional in the difficulties it encountered in the first years of its organization, but the spirit of the leaders had no fear of the possibility of failure.

The second meeting would have discouraged men of ordinary pluck. On gathering at Madison in 1854, Dr. Ladd's successor could not be found. No provision had been made for a place of meeting. Six friends of education representing six schoolbook publishing houses greeted five teachers wandering around the hotel. At last one hunted up the sheriff and obtained the key to the courthouse; another bought a pound of candles for lighting. At the evening session the audience consisted of one gentleman who gave close attention to the president as he read his address. Our joy in having one hearer was stilled when we learned that he was "stone deaf." The five teachers present, foreseeing the danger of "special interests" control, took advantage of their opportunity, and amended the constitution by admitting only teachers to active membership.

Thru the persistent energy of President McMynn the third meeting at Racine was a triumphant success, and the Wisconsin State Teachers Association holds sway in educational matters in the state.

In the call for a meeting for the purpose of organizing a national association, the three state associations named as successors to the Mining Region Teachers Association, itself a child of the Chicago convention of 1846, were represented by their respective presidents. With all these gentlemen it was my privilege to be a colaborer in the early 50's.

The chairman of the convention was an Iowa man, who was also an active member of the Mining Region Teachers Association at its last session in 1852.

The claim to parentage of the National Education Association may be questioned, but I think prenatal conditions affecting its character may be traced in some measure to the convention of 1846 in Chicago.

When I entered upon my work in Chicago in 1864, the names of the school buildings carried me back eighteen years to gentlemen who were promoters of the convention of 1846. Messrs. Jones, Scammon, Kinzie, Brown, Ogden, Newberry, and Foster were still in active business life and were still warm supporters of the public-school system of the city.

In 1846 the blockhouse built for the defense of the city was standing at the mouth of the harbor, but the Dearborn School, named in honor of General Dearborn, United States Army, proved a better means of defense to the city and the blockhouse has been removed.

B. THE REBIRTH OF THE ASSOCIATION IN 1884

THOMAS W. BICKNELL, PROVIDENCE, R.I., PRESIDENT OF THE NATIONAL EDUCATIONAL ASSOCIATION IN 1884

In the city of Philadelphia, August, 1857, a small company of earnest teachers of New England, the middle and central western states, organized THE NATIONAL TEACHERS ASSOCIATION, "to elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States." The American Institute of Instruction was twenty-seven years old and the oldest normal school was eighteen. "The little red schoolhouse" in the East and the log-cabin school in the Central West were the prevailing types of American school architecture, wherein persons of little learning and no professional training essayed to teach what the elementary textbooks of arithmetic, geography, grammar, and spelling held within their covers.

This was the primary period of American education. Thirteen years later, at Cleveland, the name became "THE NATIONAL EDUCATIONAL ASSOCIATION," which it held until 1907, when, by act of Congress, its charter name became "THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES." The changes in the name were important, but of little worth compared with the development of the Association in its structure, functions, and work.

Today, after fifty-five years of life, and on the Fiftieth Anniversary meeting, the National Education Association is the most influential organization of its kind among civilized nations. Its possible teaching constituency is at least three-quarters of a million persons. The breadth of its work includes all grades from the kindergarten thru the university. There is no educational question too minute for its consideration, none too philosophic for its solution. Its various departments, including its crowning glory, the National Council of Education, individualize, differentiate, and specialize educational studies and focalize professional

forces. Its methods of procedure are democratic and progressive, while its influence outruns its years, and makes it at this anniversary the most potent agency in the educational world, representing as it does the great democracy of the common-school teaching fraternity.

My topic, "The Rebirth of the Association in 1884," assumes much, but my time limit compels me to address myself briefly to certain great changes in the Association methods, purposes, and work consequent upon that historic meeting, leaving its history to other and more impersonal critics and historians. These changes seemed at the time so important and fundamental that they were at once adopted and have since become permanent in the structure of the great organization.

The first principle of essential value established was the unity and solidarity of the teachers and teaching forces of the United States. The National Association is a fact as well as a name, binding the educators of all grades and all localities, North, South, East, and West, in one composite body. It may seem to you today a singular state of the educational mind of a generation ago when I tell you that it was then seriously proposed, in view of the meager attendance and apparently small influence of the national body, to abandon the National Education Association, and to form three sectional associations, outside of New England, which had the American Institute of Instruction, then a half-century old. It was thought that the Middle States and New England had such a homogeneity in their history and educational traditions that their educators would rally about the old standards of Horace Mann, Henry Barnard, Francis Wayland, George B. Emerson, and those of earlier but most progressive schools, and make the old Institute their rallying-point.

The second association was to include the states of the Mississippi Valley, with the Western Teachers' College of 1831, of Cincinnati, as the basis of union.

The third educational body was to include all the states south of the Mason and Dixon line.

The fourth was to include the mountain and Pacific states.

As supplementary to this geographical division of the workers, it was proposed to hold, once in three or four years, a union or a national educational congress of the four sectional bodies, in order that the sentiment of unity and solidarity might be preserved.

The Madison meeting set forever at rest the question of sectional jealousies and rivalries, and was as complete a solvent of educational separation as was the Civil War of the doctrine of state secession. The National Education Association became a nation-wide institution in 1884.

The principle of national unity in education as the basis of democratic institutions was most emphatically illustrated and enforced at Madison in the broader scope given to Association work—a principle which has been recognized in expanding measure in all the subsequent history of

the National Education Association. To illustrate: temperance in school education was advocated by Miss Frances E. Willard. The education of the Negro to become a vital factor in the future development of both races was discussed by three Negro advocates of the South, one of whom was Booker T. Washington, who made his maiden education speech at Madison. The Indian was the theme of General S. C. Armstrong, General Pratt, and others. Dr. Alexander Graham Bell opened the great question of the training of the defective classes by an able symposium on the education of deaf mutes. "Education in the Southland" was presented ably and eloquently by Dr. Bingham and Dr. Mayo, "Citizenship, the Great Asset of American Education," by Dr. Curry, general agent of the Peabody Fund.

The New Education, then coming to the front, had a distinguished advocate in Colonel Francis W. Parker. These and kindred topics lifted the Association out of the ruts of conventionalism and sent it along the highway of human thought and progress.

Perhaps the most marked feature of broader and clearer educational vision at Madison was seen in an educational exposition in the state capitol, under the direction of Dr. James H. Smart of Indiana, the first and only exhibit ever made by the Association, arranged under five departments.

I. Industrial and Technical Education.
II. State Exhibits of Common-School Work.
III. Art.
IV. Special Exhibits, as Ward's Museum of Rochester, etc.
V. Kindergarten.

Dr. William T. Harris, chairman of committees, reporting on the exposition as a whole, wrote:

> In extent and completeness the Madison exhibit challenged comparison with the Centennial educational display at Philadelphia. Expectations tho large were more than realized. The rooms of the display were thronged from the very beginning. One cannot calculate the influence of it for good. The thousands who studied these exhibits went home impressed with the paramount importance of the claims of the new education and with a vivid idea of its appliances. It only remains to say that the exposition was a grand success in all its departments and formed a very important feature in the greatest educational gathering ever held in this country.

For the first time in the history of the Association, the officers and members were confronted with a strange experience in dealing with new financial problems. For twenty-three years, "Debt," "Debt," "Debt," had been the cry of the treasury, and at the last meeting of the Association at Saratoga Springs, a deficit of $1,200 faced the members, only half of which had been wiped out when I took the presidency. Now, at Madison, with debts all paid, the Association had fallen heir to a substantial sum approximating $5,000. Suddenly and by magic the National Education Association was transferred from a condition of poverty and indebtedness to that of independence and bond-holding. Instead of a problem of debt-

paying, the Association faced one of money-investing. Surely here was a new departure, a phase of the New Education most devoutly to be grateful for. Philosophy is good, philosophy with a good bank account is far better. Art and science are essential to progress, but the science of investing earnings and the art of cutting coupons are essentials to life. The fund of $3,000 begun in 1884 has grown in the twenty-eight years to nearly $200,000. So vital is the matter of finance to the National Education Association that I see the necessity of a prompt enlargement of the invested fund to a million dollars, and a campaign for its raising should be begun at this meeting and made a fitting supplement as well as complement of a half-century of work. Such a fund would afford an income sufficient to carry on the great work of the departments and the general Association and relieve the membership of the annual tax of two dollars a year. The expense of attendance at the Association is a sufficient tax on the members, and provision should be made at this meeting for a speedy removal of the two-dollar fee. A capable financial secretary could easily raise the fund of the National Education Association to a million dollars and place it on a sound financial footing. In a great association nothing contributes the elements of independence, loyalty, and progress so completely as an adequate treasury and a good bank account. For the advance of such a measure, "my hat is in the ring."

Dr. William T. Harris, who tho absent in the body is present in spirit and is our great leader still, states in his historical review of the Association and his estimate of the value of forces, that the members in attendance constitute one-half the value of the meetings, in social, educational, and inspirational ways. Prior to 1884, the annual meetings of the National Education Association seldom exceeded three hundred members, and in some cases not half that number. The first meeting recorded an attendance of 43 persons, including two women, who were not allowed membership in those early, barbaric days. By a conservative estimate, more than 7,000 persons participated in the benefits of the Madison meeting—a number considerably in excess of the total attendance of all previous meetings of the National Education Association. Since that date, few have been smaller in numbers, while at the Boston meeting appeared the immense enrollment of 36,000 members—a marvelous figure as to numbers and values. The total attendance since 1884 is estimated at 250,000 while the 23 previous meetings did not exceed 6,000 persons. On the basis of estimated attendance merely, the meetings since 1884 have been forty times greater in potentiality than those preceding, but this is a low estimate, inasmuch as multiples have an increasing kinetic force, in a geometric ratio. It is safe to assume that today the great body of American teachers absent from this meeting are conscious of its convocation, and are consciously or unconsciously moved by the spirits which issue from the national press and are flashed by the wires over this and other lands.

Madison set a new standard of attendance and values and its excelsior spirit still survives in the annual meetings, in increasing values.

One of the most valuable assets of the Association is its business policy, inherited from 1884. Prior to that time the Association was conducted on the *laissez-faire* doctrine, or a "go-as-you-please" policy. Great men or great businesses do not succeed on either of those lines. Organization is the law of development and educators have been slow to recognize the principle. The first move, made in the 1884 campaign, was to secure a state manager in every state in the country. These men and women were the eyes, hands, and feet of the executive in all the important matters relating to each state, such as the distribution of information, awakening interest, enlistment of the press, and all other matters which served the interests of the National Education Association. We called them general managers in 1884. You name them state directors.

The newspaper press of the country was organized under a national press manager. The railroads were under the direction of able railroad managers. I notice that at this meeting the National Education Association is under the management of the railroads. In 1884, the railroads published and distributed about half a million circulars and booklets relating to the meeting and its attractive adjuncts, at a cost to the several lines traversing the great Northwest of about $5,000. Business plans, organization, directive force were first put in active service in 1884. The immense significance of women's work in education was recognized for the first time, in any adequate way, in 1884. Two women were elected as vice-presidents, and six were added to the Board of Counselors, now Directors. The names of twenty-three women educators are recorded as speakers or officers of the National Education Association, and for the first time in the history of this body, a lady teacher presided over one of its most important meetings, in the person of Miss Sarah E. Doyle, of Providence, R.I., to whom the President committed the official gavel, in recognition of the equality of men and women in the educational world, at least—the President himself being a firm believer in the equality of rights of men and women in all departments of the world's work.

Another contribution of 1884 was the splendid social and human side of the program, and the interchange of state-wide, sectional, and national courtesies and fellowships. Not only did the men and women of the East and the West, the North and the South, come into personal relations and acquaintance at Madison, as never before, but the men and women of New England, of the East and the South, saw for the first time the grandeur and nobility of the Central West and the Northwest, the magnificence of the mountain regions, and the unsurpassed beauties and grandeur of the Pacific slope; while, on the other hand, the West sent her sons and daughters to the East to study the historic past of the Old Thirteen, and to sniff the cool vacation breezes of the Atlantic slope. Anglo-Saxon, Celt, Caucasian,

Ethiopian, Indian, Mongolian mingled as brethren in the unifying and race-erasing influence of a high educational idealism, and the elevating power of a great professional enthusiasm. The spirit of Christian democracy ruled the occasion from first to last and partisan politics found no place or part in the affairs of the National Education Association. The President refused a unanimous re-nomination, generously offered by the Committee on Nominations, thru the hands of Dr. William T. Harris, and received with applause by the great convention. It was only after much persuasion that Dr. F. Louis Soldan, the modest but eminent and scholarly superintendent of schools of St. Louis, consented to assume the large responsibilities of the office. Political methods in the selection of the leading officers were not the outcome of the Madison meeting. Personal ambitions and partisan thimble-rigging were silenced in the presence of the great personalities, the great inspirations, and the amazing possibilities made apparent at this historic meeting. Men and women felt the cohesive force of unity in a great cause, and the divisive force of personal ambition was of necessity banished from thought and act. The sublimity of a great cause dwarfed individual conceits, and the presence of the matchless womanhood of Frances E. Willard, May Wright Sewall, and Clara E. Conway, and the grand manhood of Josiah L. Pickard, Emerson E. White, Albert G. Lane, George Howland, John D. Philbrick, J. L. M. Curry, Alexander Graham Bell, and William Torrey Harris made lesser men humble and docile, as are the lesser Alps in the presence of Mont Blanc.

There is another and possibly a still larger consideration that received its great momentum at Madison, proceeding from the new sensation of great strength, both numerical and financial, and that was the spirit and initiative of large plans and undertakings. I have not time to enumerate those launched in 1884 and since, but it is safe to state that the Association came into a realization and possession of its larger self, and a fuller self-consciousness, and, growing out of that enlargement, it has fulfilled the Virgilian adage, *Possunt quia posse videntur*. It is on this principle that all growth and progress proceeds, and the Association will continue its growth so long as it seeks new and larger fields of work, and flinches not in the presence of mountains of labor.

Sidney Lanier, the great poet of the Southland, in "The Psalm of the West," sings of the time when shall—

> Science be known as the sense making love to the All,
> And Love be known as the marriage of man with the All—
> Till Science to knowing the Highest shall lovingly turn,
> Till Art to loving the Highest shall consciously own,
> Till Science to Art, as a man to a woman shall yearn—
> Then Morn! . . . .

This, it seems to me, was the philosophic outcome of the new birth at Madison, the upspringing of a great body of educators to the new visions

of duty, the realization of great tasks to be done, and the consciousness of a new spirit to enter upon the work of doing, and so long as the Association shall hold its ultimate in

far-off Divine events,
Toward which the whole creation moves,

its great mission cannot end. Today, great questions loom up before the seers in the educational watchtowers. On the professional and administrative side, we have the need of a Department of Education in the United States government, side by side with those of Agriculture, State, War, and the Navy, as in France, Germany, and other foreign states. Education must be officially recognized as the force that makes and protects a republic, and is superior to armies and navies. We must demand that talent and training for teaching are not limited by sex lines, and that the rewards of labor are increased by quality, and not by the cut of the garment or the dress of the hair.

The time has fully come, so it seems to me, when our profession shall have a titular recognition in honors and degrees as do other learned bodies. A four-year course of liberal studies in a normal school is certainly the equivalent of a four-year college course, half of which may be devoted to ball and boat. We should give to the normal graduates the titles that labor and scholarship have rightly earned, as do the colleges, and our great fraternity will never come into its own, educationally, socially, financially, morally, until graduating degrees are granted by all first-grade normal schools and colleges.

A word on another point and I am done. In 1884, a committee was appointed to plan for an international council of education, but the council has never materialized. At Boston, in 1910, it was my pleasure to present a new resolution in favor of such a council, and it was unanimously indorsed by this Association. The first meeting of that committee was held today, and the first steps have been taken toward bringing such a council into being—the result of a purpose initiated twenty-eight years ago. It is sincerely hoped that within a twelvemonth there may be held at Washington a congress of representative educators of all civilized nations, to the end of forming a representative council which shall bring into acquaintance and alliance the educational leaders of all lands and tongues.

C. THE IDEALS OF HALF A CENTURY

JACQUES W. REDWAY, F.R.G.S., MOUNT VERNON, N.Y.

I am not quite certain that my conception of an ideal is correct, nor that I can always distinguish between an ideal and a fad. I decline, however, to accept a cold-blooded dictionary definition of the word, and reserve the right to create my own conception, and to apply it to the time and the occasion.

Perhaps the ideal may be a mental concept of a perfect standard, but it is the concept of a standard that one never reaches—like the end of the rainbow it is always a little beyond the grasp. But the rainbow is never anything more than rainbow; on the contrary, the ideal is ever growing and expanding and unfolding as we pursue it, until the mind is lost in the contemplation of its immensity. Signposts of gold mark its bypaths, and its ways are strewn with acres of diamonds.

The unfolding of a true ideal is like the growth of a plant. Today it is a bud, tomorrow its leaves and petals will expand, then comes the seed; and the shell contains the forests of a thousand centuries. Or we may liken it to the water that comes from a patch of summer cloud. Like a thought descending from heaven, the drops let loose from the mists above fall upon the earth. They gather into rills and brooks until, at last, they grow into a resistless flood that may bear on its bosom all the world's battleships. But the true ideal is never reached; for it is the distilled idea that is conceived of activity and born of everlasting progress.

In his vision of the New Jerusalem, St. John pictured what seemed to him an ideal; but St. John's vision must have rubbed against earthly cobwebs and dust before reaching his eyes. We have grown so tremendously in twenty centuries that a municipal art commission would condemn its lack of concinnity in design, and the health board would close its portals until a modern sewer system should be installed. The accepted ideal of today is the rejected of tomorrow.

In the New Commandment which our great Master and Teacher gave us, we have perhaps the best example of a true ideal—that of conduct in life. It was uttered in less than a score of words, yet out of it has grown all that is good in civilization; and out of it have grown all those blessed attributes which we sum up in the Fatherhood of God and the brotherhood of man. It is the ideal of growth in knowledge, growth in grace, and growth in wisdom. And the root of it all is growth. One may reach the limits of an imperfect standard, but the true ideal has no limits of expansion, save those of the human mind.

My task at this time is to set forth the educational ideals of the past half-century. If it is to be a relation of the ideals for which this Association has actively battled, then the task is easy; it has actively fostered none. It has issued manifestoes of principles, it is true; but it has actively stood for but few; and they, alas, have sometimes fallen stillborn. The Association has been an open forum for every new idea in education, and this must be placed to its everlasting credit; but its support has almost always been passive. For want of an effective organization it has been too often a plaything in the hands of demagogues, rather than a force to be felt in education. Educational adventurers have more than once packed its business meetings in order to obtain a little cheap glory, but they have

wrought derision rather than lasting harm. The steam roller may not have grown rusty, but certainly it has broken no foundation stones.

Could a consensus of opinion be expressed by the rank and file of membership, it would probably disclose the fact that the Association has failed to command the influence to be expected of such a representative body. The press has rarely taken it seriously; and school boards, as a rule, have ignored it. Nevertheless, in the management of its affairs, tho there may have been more or less to criticize, there has been much more to commend.

For this state of affairs, its imperfect organization and passive attitude are mainly responsible. Its stamp of approval has been placed on many good things but it has rarely fought in the open for them. At this convention the Association is to be honored by an address from Dr. Harvey W. Wiley, one of the great benefactors of his times. Now, Dr. Wiley stands for an ideal; not only that, he stands in the open and hands out tremendously hard uppercuts for it. And the Association might sit up and listen; instead of inviting Dr. Wiley to lecture us, we should be sending Dr. Wiley and a thousand more like him thruout the land to preach the gospel of genuineness in all that pertains to humanity. The tacit approval of a great principle counts for but little; the world respects us only when we strip and fight for it.

In the first few years of its existence, the Association confined itself very largely to the discussion of the problems of the schoolroom, especially to methods of teaching. One of these, "object-teaching," quickly became a fad. It was a clever bit of advertising on the part of certain venders of school equipment and, after a brief but strenuous existence, it died naturally and easily—killed by ridicule. But out of the ridiculous there grew that which has approached the sublime. The discussion of object-teaching led to investigations concerning the relative value of the Socratic, as compared with the didactic method of instruction. As a result, each was assigned to its proper time and place. And right there came trouble; for before the problems of time and place could be settled, it was necessary to investigate a question in psychology—namely, the growth of the child's mind. That problem likewise was solved for all practical purposes; and when it was solved the whole subject of elementary education was lifted from an empirical to a psychological basis. Let us admit, brethren, that we are not quite firm on our pegs yet, but we have made wonderful strides.

Forty years ago, when the "don't" idea worried us, we used to discuss preventive measures—among them, how to prevent whispering in school. Then we wondered if really it was best to prevent it; finally, we were compelled to own that it wasn't. But out of this has grown the question of self-conduct, and this we must admit is a long stride in the direction of an ideal; it is a very close approach to the ideal of true democracy; for he who controls others must first learn to govern himself.

In the past fifty years the Association has toyed with many old things with new names, and with new things under old names. Psychology has always been with us. As a craft, for more than twenty years, we both misused it and abused it. Finally we discovered that a knowledge of it is a most valuable equipment when the child is made the objective point; for the successful teacher of today is the one who studies the child, mind and body. The "Quincy" method, the Herbartian ideas, and apperception came in time; likewise motivation and the Montessori system were topics whose value was to be proven. We did not need to prove anything; we all admitted that we had used them for years. And the funny part of it is that we had. There was scarcely a new idea in any one, except that each had been organized into a system; and when we put organization and system into a thing we are on the road, if not to an ideal, at least to success.

The Association is responsible for the enrichment of the elementary courses of study and, on the whole, made a pretty bad mess of it. Possibly the various committees in charge of the work thought they perceived visions of an ideal; but what they most likely saw were ghosts of disordered digestion. Somewhere between makers and users of the enriched course there was lost the fine distinction between enrichment and engorgement. A superficial smattering in many subjects and thoroness in none has been one result of the attempt at enrichment. Now, one cannot deny that a proper enrichment of the course of study is a step toward an ideal; but conservative educators have a dim suspicion that we have not yet discovered how to enrich, when to enrich, and where to enrich. When we have learned all this we certainly shall have made an approach to an ideal; we likewise shall have made half a century of progress in a single leap.

The Association has always shown a kindly spirit toward manual training and its kindred subjects, but we have not always borne in mind its ultimate end. For twenty years or more we have done but little more than discuss whether it should be vocational as its end, or merely disciplinary. As a matter of fact, each view is correct. But, brethren of the craft, neither one is the ultimate end, and if we cannot see beyond these issues we would better relegate the subject to the technical schools. As a matter of fact, manual training has two very definite values, neither one of which is strictly disciplinary, nor can it be called vocational: first, it is the application of thought to action; second, it lessens the interval between thought and action. Granted that other values exist, these alone entitle it to a place in the school curriculum.

The Association has tacitly concerned itself with the intellectual equipment of the teacher, but never seriously with the teacher's personality. For about a century we have ignored pretty nearly every other feature in the licensing of teachers except the possession of a certain academic knowledge of questionable value. In the employment of teachers, superintendents and school boards are usually careful about the personality of

the faculty; in licensing them, the state ignores it. As a result we may find within the ranks of the profession about every variety of fitness and unfitness. The method of certification merely rates a certain intellectual equipment in terms per cent. Let me present two extremes:

In a certain city was a principal of extraordinary ability, whom I will designate as *it*. In person, *it* was coarse and vulgar; in character, brutal and vicious; in mind, vile and unclean. Externally *it* possessed a thin veneer of respectability, which quickly disappeared on closer acquaintance. *It* surrounded itself with assistants of similar character. Such attributes of character are more or less contagious, and the school became known for its low moral status. There were attempts to remove the principal, but for a long time they failed thru the influence of a disreputable political heeler. In time, however, *it* ran into the clutches of the police. Now, modern society will tolerate almost any ordinary shortcomings in character, but draws a sharp line in front of the district attorney's office and the jail; and when the doors of the prison closed with *it* on the inside, there was an end to *it*.

Let us turn to a pleasanter picture. Have you ever heard of Jane Andrews? Of course not. Not more than two members of this audience ever heard of her, and they were her neighbors. Who was she? Why, just a plain, sweet woman of beautiful character, an unusual stock of good common-sense, and a wonderful influence over children. She taught a mission school in New York City. She never could have passed a Regents' examination, and none of her pupils were ever entered in Division X, Schedule K, State Education Department.

Jane Andrews began her work at the age of eighteen, and for fifty-eight years lost scarcely a day. Her job was the taming and training of about forty little wild animals gathered from the slums of a great city. And right royally she accomplished her work. A surprisingly large number of her pupils became wholesome and useful men and women. Some of them are grandparents now. But grandparents, parents, and old boys always remained her loyal friends. The door of every city official was open to her, and New York's most famous society leader was her friend and coadjutor. At the age of eighty-two the external form, like a garment that is worn out and ready to be cast aside, was laid to rest. But a character like that of Jane Andrews never dies. It lives in the hearts of those who loved her, and is passed on from generation to generation.

Perhaps Jane Andrews could not have passed the state examinations now required for a teacher's certificate; but is there not something the matter with the law that certifies to the fitness of a modern Frankenstein on the one hand, and excludes a woman having the qualifications possessed by Jane Andrews? Unfortunately the state recognizes only an intellectual equipment; and this sometimes results in giving to the school board a choice between a prig and an academic paralytic. Let it be said to the

everlasting credit of the Association, however, that tho it has taken no stand in the licensing of teachers, it has always stood for the training of them.

One of the most important features of child life in school has but recently come before the Association—namely, a rational medical inspection in schools. After nearly a century of public-school education, we are beginning to realize what we have been told many times. We are beginning to understand that a sound body is quite as requisite in the making of an effective man as is a sound mind. We are waking to the fact that we have no moral right to launch a boy into manhood without both. Still more, it is unreasonable to expect a feeble, abnormal mother to bring healthy and vigorous children into the world, or to nourish them properly thru the period of infancy. It is an incalculable blessing, I say, that the Association is facing this all-important question.

In the city of Mount Vernon the school authorities were compelled by conditions that could no longer be ignored to take the matter in hand. The city's health board, in compliance with statutory laws, had inspected school buildings and school pupils for years. The health-office physicians had performed their work faithfully and conscientiously. The inspection in question was for the purpose of discovering contagious and infectious ailments; practically, it amounted to the abatement of the traveling menageries which from time immemorial have performed upon the external anatomy of school children.

All this time, the city was paying not far from fourteen thousand dollars a year for "carrying the left-overs"—the pupils who failed in examination for promotion. It did not require the services of an expert to learn where the trouble lay; we had learned it by sad experience. Half, or more than half the cases of retardation were due to causes that could have been removed—defective eyesight, defective hearing, defective breathing, defective teeth, adenoid growths, malnutrition, and incipient tuberculosis.

We simply swept all traditions aside and appointed a health staff of our own, consisting of a physician, a nurse, and teachers chosen for the purpose. Their duty is straight to the point—namely, the discovery of the defects of mind and body that interfere with the pupil's progress in school. It costs money, it is true; but for every dollar spent in the work, two will be saved. And aside from all this, one may also view the matter from the standpoint of humanity's sake.

When the patrons of the schools began to understand the merits of its case, oh, how quickly they came to our aid. The children were provided with summer playgrounds and all the land required for children's gardens. It brought to view the necessity of open-air classes, and of classes for exceptional children. The city hospital is about to give us the benefit of its staff of physicians and surgeons, and clinics are to be established for the

exclusive use of school children. Incidentally, one of the first discoveries was that retarded pupils may sometimes get on their feet and walk by taking one or another of the courses in the manual-training schools. I may safely say that in our own case this rational treatment of retarded pupils is certainly a step toward an ideal.

Finally, let me specify three ideals for which the Association has stood in the past, passively but not actively, indirectly but not positively, and timidly rather than fearlessly: first of all is the child, whom we wish to train into ideal manhood; second, the ideal teacher; and last, the ideal training. These, brethren of the craft, are likewise the ideals we must pursue in the half-century to come. I have a dim suspicion that this subject will not be assigned to me at the anniversary of the association fifty years hence, but I sincerely hope and pray that someone present at this convention will have that pleasurable task.

But the work of the Association for the next half-century must be an active and not a passive campaign. Remember, brethren, that the greatest enemy to humanity in all the world is ignorance. This is the force against which we must contend, today and forever. Let us therefore gird on the armor of everlasting righteousness and fight—and then fight some more.

D. THE MONUMENTS: THE ACHIEVEMENTS OF FIFTY YEARS

JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.

"Behold how great a matter a little fire kindleth."

To T. W. Valentine, a president of the State Teachers' Association of New York, belongs the credit of initiating the movement to establish a national educational association. In conference with Daniel B. Hagar, president of the Massachusetts State Teachers' Association, a call for a convention was agreed upon, and it was prepared by Daniel B. Hagar in 1856. This call was signed by the presidents of nine state teachers' associations, as follows:

T. W. Valentine.....New York	W. Roberts.....Pennsylvania
D. B. Hagar.....Massachusetts	C. Pearse.....Vermont
W. T. Luckey.....Missouri	D. Franklin.....Iowa
J. Tenny.....New Hampshire	A. C. Spicer.....Wisconsin
J. G. May.....Indiana	

In pursuance of this call, a small number of educators, representative in character, assembled in Philadelphia, August 26, 1857. The meeting was called to order by Mr. T. W. Valentine, who explained its purposes; a resolution was adopted to the effect that it was expedient to organize a national teachers' association; a constitution was prepared by a committee appointed for that purpose, and it was submitted and adopted. Zalmon

Richards of Washington, D.C., was elected president, and J. W. Bulkley, New York, secretary. Forty-three members were enrolled; twelve states and the District of Columbia were represented.

These men had a clear vision of what the country needed educationally, and they stood for the general diffusion of knowledge, culture, and power among all the people. They stated the object of the organization as follows: "To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education." Upon this creed they organized the National Teachers' Association, which was changed at Cleveland, Ohio, in 1870, to the National Educational Association. With a change in the title, the object of the organization was more specifically designated by the phrase "in the United States," so that it read, when amended: "To raise the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States." Thus matters stood for twenty-nine years.

In 1886, the National Educational Association was incorporated under the laws of the District of Columbia, and in 1906, reincorporated under a special act of Congress as the "National Education Association."

In the Act of Incorporation, Section 2, the first sentence is as follows: "That the purpose and object of said corporation shall be to promote the cause of education in the United States." From these extracts no question can be raised as to the object the incorporators had in view. In the interpretation of legal and other important documents, it is a principle universally followed when differences of construction arise, in order to ascertain what precise meaning the authors had in mind when they framed the instrument and submitted it to the judgment of those who in future would be most vitally interested, to interrogate the authors themselves, if living, or to admit the oral testimony of their contemporaries. In this case the documentary evidence is clear, explicit, and conclusive, being the same in form and spirit in 1912 that it was in 1857, namely: "That the purpose and object of said corporation shall be to elevate the character and advance the interests of the profession of teaching, and to promote the cause of education in the United States." It is upon this platform that the educational and financial policy of this corporation has been conducted, and any material departure from these cardinal principles will impair its usefulness and lead to disintegration. Therefore, the future management must be along broad and equitable lines to all sections of this country.

THE ASSOCIATION AS I FIRST SAW IT

Twenty-seven years of the National Educational Association had passed into history before I knew anything personally of its direct management, altho I attended the session held in St. Louis, in August, 1871, more out of curiosity than for any other reason, to see the noted men and women, numbering, perhaps, one hundred and fifty persons, composing that august

body. They were dignified, earnest, thinking men and women, seeking the higher and better things of the mind. The elementary section enrolled seventy-one members; the higher educational section and the normal-school section each had too few to count.

I paid the fee, $1.50, and never missed a meeting, and I heard the ablest in that convention. The big men, as I rated them, were J. P. Wickersham, E. E. White, Eli T. Tappan, J. D. Philbrick, N. A. Calkins, John Hancock, Newton Bateman, J. L. Pickard, James McCosh, Daniel Read, and, just coming into the foreground, William T. Harris and Thomas Davidson.

After a three days' session I went home feeling that I had at least seen in the flesh some of the most prominent educators of our country, little dreaming that in after-years I should be thrown into intimate personal and official relations with some of these men, and later with hundreds of others as worthy and actuated by the same high, noble, and unselfish motives. At the close of this session the "hat was passed" to take up a collection to publish the volume of *Proceedings*—which is the earliest volume I have seen.

Thirteen years elapsed before I attended another session, and this was when the Honorable Thomas W. Bicknell's "Greatest Educational Show on Earth" was held in Madison, Wis., July, 1884. One cold Saturday forenoon during the winter of 1883–84, there rushed into my office a large, well-dressed man, wearing a high silk hat, and an elegant blue-caped overcoat. He spoke in a stentorian voice, saying: "I am Mr. Thomas W. Bicknell, Boston, Mass., editor of the *New England Journal of Education*, president of the National Association. I have been told that you are a live man, and I want you to read a paper before the Association next July at Madison. I am traveling at my own expense, with the exception of a little clerk hire, working up a general interest in the cause of education thruout our entire country. When do the Sunday schools meet tomorrow? I want to speak about ten minutes at each one, and tell your Sunday-school people who I am, and what I am endeavoring to do. Now, can you supply me with some stationery, as I must write a number of letters?"

Whereupon, we shook hands and I supplied him with what he wanted. He took off his hat, threw off his overcoat, and began writing at a furious rate at my desk. Being half amused, as he dashed off his letters, I made out a list of the leading Protestant churches in the city, and the hours when the Sunday schools were held, and handed it to him. I learned later that the Honorable Thomas W. Bicknell spoke at a dozen or more churches that forenoon. The superintendents of the Sunday schools wondered thereat, and when I told them how he introduced himself to me, it appeared that he used practically the same speech to each of them.

Just here I will say that it took such a man to arouse the latent educational thought of the entire country, and he was the man for the occasion and for the hour. The Association had always been in debt, and it was simply vegetating from year to year when he took hold of the helm.

THE NATIONAL COUNCIL

As the National Council, organized in 1880, sprang out of the National Educational Association, and as a legitimate branch of it, a survey of both is here necessary—namely, of the National Council as such, and of the management and the financial policy of the general Educational Association itself.

In this body it has never been the intention to settle any educational questions by a vote. A topic was presented by a member who had been chosen for that purpose. He read his thesis, and then took his seat in the center of the room, ready to defend his contention against all who differed from him. It was not the thought to have an audience; however, spectators, if there were seats, were not excluded. The primary object of this body was investigation and deliberation.

It was at the Madison meeting in 1884 that I sat for the first time as a spectator in the National Council and listened to the discussions. A colored principal of Kansas City, W. W. Yates, accompanied me. We sat and listened for an hour or more to a discussion on school hygiene. Dr. Emerson E. White was presiding, and Mr. George P. Brown was reporting the discussion. The discussion dragged at one time. Mr. Yates wanted to speak, and not knowing that members only were privileged to speak, he arose without an invitation, addressed the chair, and thereupon proceeded to present his views. Being a Negro, he spoke five minutes without interruption, to the no little astonishment of the members of the Council, and the great amusement of the few spectators present. For many years the Council was limited to sixty members till at the Cleveland session, in 1908, the membership was doubled.

Beginning with the session of 1884, I have been present at all of the meetings of the National Educational Association, except two; and for twenty-two years I have been familiar with the inside workings of both organizations and known what their unwritten history is, and know what the leading educators have endeavored to accomplish with untiring zeal.

Both organizations are strictly democratic in the broadest representative sense under law, composed in the beginning of persons of strong convictions and steadiness of purpose in promoting sound pedagogical theory and practice.

It was the thought of the founders of the Council that its members should, thru committees and otherwise, submit papers and reports on all kinds of educational questions, and upon these the widest latitude of expert opinions should be sought for, expressed, and published. In the selection of members, the dominant idea was to choose persons who should work in determining aims and principles of education by starting from fixed points, and proceed to examine critically old and new educational problems.

To sum up briefly, those who organized the National Council of Education believed that earnestness in seeking after truth is an indispensable

requisite for finding it, and that modesty, patience, caution, and a broad and liberal training are necessary qualifications for enabling one, not only to reason correctly on his own reasoning, but to bring men and women to higher planes of thinking—to understand relations and laws and their force in determining the right in all matters of thought and action.

There was an unwritten law, also, that any person who sought to become a member of the Council was not wanted. Membership sought the individual, and not otherwise. No member of the Council since its organization ever announced his candidacy in that body. It is not a political body, and it is not patterned after political methods, or conducted as a political machine.

THE GENERAL ASSOCIATION—ITS EARLY POVERTY

It was a common thing for members as late as 1884 to advance cash to publish the volume of *Proceedings*. William E. Sheldon of Massachusetts paid $229.97, and Eli T. Tappan of Ohio, $250, on account of the publication of the volume of 1882. Quite a number of persons became life members by paying $20, and a few, life directors by paying $100, in order to fill a depleted treasury.

At the St. Paul meeting in 1890 I was elected treasurer and this brought me into close official relations with the officers and members of the Association thruout the entire country.

Since its organization in 1857, till July, 1910, the high ideals set by its founders, "To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States," had never been departed from in the least particular. Thru all the years of adversity and the later ones of prosperity, the same principles of choosing officers for the National Education Association that now obtain in the National Council had prevailed, and no one ever, except at the Asbury Park session, came forward as an avowed candidate for the presidency of the Association, or for any position. Those who founded the Association and their successors had different objects in view from that of vote-trading and "office-getting." Prior to 1910, with the exception previously mentioned, organized efforts in advance by candidates to capture offices in the Association were unknown.

For one, I hope that the temporary deviation from the great purpose of the organization will soon pass away.

THE PERMANENT FUND AND THE RAIDERS

As soon as this fund was of sufficient size to attract the eyes of the covetous, all kinds of schemes were devised to get hold of it and dissipate it. A person in the East proposed to collect the names of all the teachers and school officials and their addresses, and turn this list over to the Board of Trustees to circularize them, for which the promoter asked the modest

sum of twenty-five thousand dollars for his share of the work. Dr. Calkins and Superintendent Lane referred the proposition to me. It died without a burial. This promoter soon became insolvent, and filed a voluntary petition in bankruptcy. Furthermore the deponent saith not.

Dr. Calkins and Superintendent Lane were both modest men, and while we were associated as a committee, or as an advisory board, I was selected by them to watch the treasury—not a thankful or popular task.

After a beginning had been made, and the Association was more than meeting expenses, and some money could be set aside each year to carry on such investigations as appeared to be necessary along educational lines, the accumulated surplus was transferred to the Permanent Fund. This has been and still is the general policy. This fund was to be added to until the interest arising therefrom with the annual membership dues should be adequate to meet the current expenses, and to carry forward the legitimate work of the corporation. It was a policy definitely outlined by Dr. Calkins, Albert Lane, Edwin Hewett, W. E. Sheldon, Aaron Gove, James A. Canfield, F. Louis Soldan, E. O. Lyte, J. M. Green, Nathan Schaeffer, L. D. Harvey, Nicholas Murray Butler, I. C. McNeill, Irwin Shepard, and the writer. This was a simple business proposition that has been pursued for the purpose of putting the organization on a solid and permanent financial footing in order to carry forward the work that ought to be done. The Permanent Fund is at this time $190,000, with a surplus of over $3,000 awaiting investment.

THE DAYS OF THE SCHEMERS NOT ENDED

For years nearly all the business details have been conducted by the ex-presidents of the Association. As chairman of the Committee on Investigations and Appropriations, I have had exceptional opportunities of receiving communications and listening to those who had discovered (but were unappreciated) the most wonderful and helpful things for the uplifting of the teaching force, and, incidentally, the youth of the country. Had an educational curiosity shop been established by the National Educational Association since 1895, it would contain more real specimens of great wants come to a premature end than any other intellectual museum in the world. There has been afforded an excellent opportunity to observe certain minds wandering among stars, guided by one lightning-bug flash. While many of these sought to do things seldom wise and never important, yet there have been others whose proposals contained far-reaching ideas, and whose investigations have been real contributions to the cause of education.

THE ANNUAL VOLUME OF PROCEEDINGS

In 1893, the writer proposed the appointment of an Editorial and Revision Committee to edit all papers except those of foreign delegates, and thus reduce the size of the volumes by eliminating in any paper what has been previously discussed by some other person. This would avoid

repetition by making references to former papers. As it is, each writer, unless he happens to have access to previous volumes, oftentimes writes on subjects that have been threshed over many times. I am still of the opinion that the proposition then advocated has merit in it, and that it would be a move in the right direction to have an Editorial and Revision Committee.

CONCLUSION

My life was but slightly connected with any of the founders of the Association. Daniel B. Hagar I met at two or three meetings of the Association, and once only I saw Professor William T. Luckey, both signers of the original call in 1856. Zalmon Richards, the first president, was a constant attendant till only a few years ago. Coming on the stage in 1884, I have known quite intimately every prominent man or woman that has been a member of the Association from that date to the present. These persons have stood for the highest and best things of the mind and heart in our civilization, and I indulge the hope that the educators of the present and future will follow their example.

When I pass in mental review the illustrious names in scholarship, culture, and other higher qualities—those who added grace and dignity to this great movement—I cannot refrain from mentioning the name of the one who has since 1893 been the great organizing power in this corporation —I mean Dr. Irwin Shepard, one of the most remarkable men among a galaxy of notable men and women of this country. To his clearsightedness, keen business sagacity, tact, and skill in conducting and handling the railroad and other transportation interests, mastery of details, and the organization of the educators in each state into a compact body of progressive men and women, the marvelous success of the Association is due. The historian of the Association will do full justice to him whose brain has planned and whose hand has executed the great work committed to his care for the past twenty years.

E. THE COMING HALF-CENTURY

ELLEN C. SABIN, PRESIDENT OF MILWAUKEE-DOWNER COLLEGE, MILWAUKEE, WIS.

You have heard the story of the past: of the original inspiration of this organization; of its renascence; of the high ideals and the noble achievements of fifty years. There have flashed before you beloved names

> with lofty passion fraught
> Such as make battles won
> On fields of Marathon.

To speak adequately of its future would require the prophet-bard, the poet-seer, the sibyl who should lift the veil and read the hidden word. A mighty ode should at once close this cycle and inspire the coming era.

But it is only the past and its legacy of the tendencies of the present that constitute the horoscope for our prediction. The glass is dim as we peer thru the lens of the future. Who can interpret the contradictory indications? Who can thru the nebulae make sure of the controlling centers?

The past revolutionary years have taught us to set no limit to the progress of the world in any direction. So far are we from skepticism that the wildest chimeras receive attention. The impossible is merely the not-yet-demonstrated. The achievements of the past have left us receptive to new revelations. Progress is the word of the day. The Magi's star, Plato's dream, the poet's vision, all utopias have been transcended before our eyes. Prophecies and ideals have come to pass from Mother Shipton's to Ruskin's and Howells'. Today we stand in alert expectancy. We do not know what we shall see, but a vast unlimited outline is in our conception, and we daily look to see it take form. Reckless would he be who should limit or define the coming half-century.

The underlying thoughts of a period and its resultant movements both affect formal education and are affected by it. Education is at once formative and impressible. While a molding power, it is itself plastic to influence. Therefore general tendencies of thought and life, as well as the obvious educational activities of our time, are in our view. It is our clearest modern seer who teaches us that the fundamental, ruling ideas that a people hold determine its greatness and happiness, or its obscurity and misery.

We recognize that, among such controlling powers, the idea of democracy is the most dominant force in the world today. It influences education in its deepest sources of feeling. It expresses itself in every department of educational activity. Vital, fruitful, it bears many products that are perversions, as well as the choicest fruits of our civilization. It depends upon education to train this luxuriant plant to beauty and beneficence, pruning its excrescences, grafting upon it cognate nobilities, nurturing its essential good until it becomes the perfect tree of the common life, with healing in its every leaf.

And with the true democratic insight into the value of each individual in the mass, there has come to us a new sense of the significance of the whole. We can, therefore, gladly see "the individual wither and the world grow more and more." This dawning recognition of the glory of humanity, the deepening sense of the importance of the race—is not this one of the sublimest of those thoughts that pierce the night of our ignorance and "urge man's search to vaster issues"?

And thus, reaching beyond the individual to the race, we have found our geographic boundaries extended—annihilated. No spot on the globe is alien to us, as no people is foreign. The sense of unity in interests and destiny makes us international in mind. We have world sympathies and

understandings. Truly, "the diet of our thought has changed." There has, consequently, with democratic ideals, with thought projected down the long line of the race, and with universal scope, developed an immeasurably enlarged conception of the purpose and field of formal education.

As life changes, education changes. The curriculum of our schools today, together with the spirit that pervades them, makes the school a place unrecognizable by some returning Rip Van Winkle of fifty, of twenty-five years ago. A new vocabulary is required to express its ordinary functions. No exposition of our varied interests is more convincing than the program of this convention! We appear to be led by the invincible spirit of progress, and only the brakes of the obdurate inertia of the teacher and the spell of tradition check our forward movement.

Tho colleges and universities have been transformed, the most significant change is observable in the first six years of school life. Here are developing both those disciplines that are most necessary to creditable existence in a highly complex civilization, and those that enrich life, making it worth living.

Under the first demand, besides reading, writing, form, and number, are health-science and art; physical training; play activities, providing for the necessity that exists to experience the exciting, dramatic emotions that free play calls into life; geography; government and civics; training the purchaser to distinguish true worth among many varieties of commodities; euthenics, eugenics.

The second demand includes literature, art, and music; self-expression in all forms, as speaking, writing, dramatic action, and dancing; manual training, the hand developing and expressing ideas, awakening the fine appreciation that only skill can elicit; history which explains the present, helps to account for one's self—"a practical psychology," it has been said—and both determines and discloses the future; first-hand nature-study with appreciations of nature in literature and art. In these manifestations are the auguries of the future, and the coming years will see some of them, as health-science, expanded, some radically changed.

And so we think of aspects of education as cultural, vocational, physical, social; of the training of head, heart, and hand; of mental and moral culture; and we strive to fuse all forms that they may be mutually supportive of the fair, symmetrical edifice we would fain construct.

In the many directions in which the awakened purpose of our day seeks to realize its ideal for humanity thru education, efforts whose harvest the future will gather and whose fan will separate its grain from the chaff, the teacher will continue to be largely the instrument.

There yet remains to be effected the development of the individuality of the child into a distinctive, unique personality, and this requires both living with others and the protection of solitude.

The problem is to be solved of the school efficiently supplementing without usurping the functions of the home.

Thru scientific study and analysis all work is to be standardized, these standards not to be iron weights and prison bars, but helpful guides and impersonal correctors.

So enriched and modified are to be certain leading studies that the cultural and the practical are to be disclosed as opposite sides of the shield, the training of the muscles to skill shown to be cultural, and the liberalized mind to be practical.

An increasingly responsible part is to be performed by the teacher, in addition to the service of the consulting psychologist, in guiding each youth to his proper business, trade, or profession, thus aiding him judiciously to enter an occupation that offers both self-realization and social benefit. With the years there must come to those who would be teachers of youth something more of what we "aspire to be and are not," some greatness to enable them to be equal to yet higher tasks than the present imposes.

Eucken has said that a proud self-consciousness and independence of youth is one of the notes of modern humanity. It is ours to meet this high spirit, not to fear, to abhor, or suppress it, but to lead it forth beyond its self-assertion and revolts, past its license and lawlessness into the "perfect liberty" of disciplined affections and ordered wills. What a challenge to guide a young generation devoid of superstition, unafraid, and daring into reverence and obedience! What may we not hope in far-reaching reforms when minds ingenuous, unwarped by prejudices, meet the compelling force of the great laws of Nature and the persuasions of the great Scriptures?

There must be established, or re-established, the connection between knowledge and responsibility for right conduct. Duty and obligation must be related to daily life. The inspiration to noble living must be imparted whether life is to be with Marcus Aurelius in a palace or with Epictetus in servitude. Loyalty, now so often dangerously diverted to group, society, or party, must give its allegiance to right principles. Noble dreams of youth, now so often the cynic's jest, must be so fortified that they will abide thruout life. We may not further tolerate the monstrous divorce of intellect from conscience, but instead make all training tend to clear perception of the right and love for it. So shall issue from our institutions of learning the "calm observer of ought and must."

The coming decades inspire us, believers in liberty and justice, with great hope of better homes and schools as we think of two generations of our race who will be reared under the influence of women who will have experienced larger opportunity than has ever before been known to woman. With education better adapted to woman's needs, and her increased opportunity to improve the conditions of human living, may we not reasonably

believe that we are on the verge of the fulfillment of Tennyson's inspired prophecy: "Then springs the crowning race of human kind"?

The splendid function of this Association, in the future as in the past, must be to organize into constantly increasing effectiveness the educational leadership of this nation. It will make great investigations, intensive and extensive, revealing to us definitely our own status and bringing to us the world's experience. It will hasten the coming of the national university, and promote national organizations that shall increase our privileges and bring the benefits of research to the humblest school.

With opulence of wisdom, it will deduce laws, interpret conditions, direct and prescribe with such assurance as the limitations of human insight will allow. While meeting ever-new social and industrial conditions, adapting content and method to constantly altered demands, it will be steadfast to its immutable purpose to preserve to their highest uses the inestimably precious hours of youth. It must be polestar and compass, chart and helm.

With all its definite and professional responsibilities, it will meet its peculiar opportunity to conserve the great ideas by which our race can live. This Association will be a bulwark to preserve the threatened faith in democracy. It will constitute a valiant army to restore the imperative of duty to its violated throne. It will

> rest in faith
> That man's perfection is the crowning flower
> Toward which the sap in life's great tree
> Is pressing—seen in puny blossoms now
> But in the world's great morrows to expand
> With broadest petal and with deepest glow.

As our forefathers stood on the beach before their great venture and heard the words: "The Lord has more truth yet to break forth: be ready to receive whatever truth shall be made known to you," so this Association, on the threshold of a future unknown but assuredly great, expecting an effulgence of truth that shall make our present seem darkness, hears the poet's adjuration: "Light the young!" Thus shall we

> save them forever
> Who shall save the world.

TOPIC: THE AMERICAN HIGH SCHOOL

A. ITS RELATION TO THE SCHOOLS BELOW

WALTER R. SIDERS, SUPERINTENDENT OF SCHOOLS, POCATELLO, IDAHO

In attempting to understand these relations it is essential to look to the origin of these two schools.

Our high school has its beginnings in the Latin grammar schools, which were first organized in Boston in 1635. The purpose of the Latin grammar school was

the preparation of the boys for the university in order that the colony might be aided in securing a body of learned men who, by acquaintance with the ancient tongues, should be able to obtain a knowledge of the Scriptures and qualified to discover the true sense and meaning of the original.

The sole aim of this school was to prepare for the ministry. Due to several causes, chief among which was the gradual separation of things religious from the state, these Latin grammar schools declined in number and influence, despite the laws enacted to perpetuate them. A new type of school arose, which, in addition to being a college preparatory school, met the demands for a practical education. For fully a century this academy was the chief source of secondary education. It was superseded by the public high school in the first quarter of the nineteenth century.

The modern high school has combined the best features of the former Latin grammar school, and of its successor, the academy. High-school courses have been broadened and liberalized until there is now no necessary conflict between preparation for life and preparation for college. The school makes social efficiency possible while encouraging and pointing the road to culture.

The elementary schools have passed thru a somewhat similar course of development altho developing independently of the Latin grammar schools and of the academies.

In 1682, writing and ciphering schools were established in Boston, giving public recognition to the value of some education for the practical affairs of life, and to the importance of providing for all who wished such training.

Almost contemporaneously with the decline of the Latin grammar schools and the rise of the academies, the curriculum of the elementary school gradually enlarged to include reading, grammar, and geography. The writing and ciphering master being unqualified to teach the new branches, a new man, called the grammar master, was secured to teach the newly adopted subjects. This system continued in force in Boston from 1740 to 1847.

In addition to this elementary school there were elementary schools connected with the academies, which elementary schools were termed the pre-academic department. The work of the academy was grouped into departments; as, first primary, second primary, intermediate, grammar, academic, and collegiate departments. Each of these departments included two or three years of work. The entire course was planned to begin at the eighth or ninth year, and to occupy a training period up to the eighteenth or twentieth year. In this way the school course came to be ten or twelve years in length and the academic or secondary course to have two, three, or four years, based on a pre-academic course of eight or nine years.

The elementary schools and the secondary schools were brought together in the middle of the last century. Their development had been

separate for a century and a half, and altho now united for nearly a century, their relationship is nominal rather than organic and real—united as by a marriage bond rather than by blood relationships springing from common origin.

Many attempts have been made to articulate the work of the grades with the high school, but the irreconcilable facts have been that the high school is broadly cultural while the elementary school is narrowly cultural and mechanical. The elementary school is largely a means to an end, the secondary school sees the attainment of many of these ends.

The end of the elementary school is not knowledge. It is rather to organize the instincts and impulses of children into working interests and tools. Attention is to methods of mental attitude and operation rather than results measured in memory. Dewey asserts the need of the development of

> a certain active interest in truth and its allies, a certain disposition to inquiry, together with a command of the tools that make it effective, and the organization of certain modes of activity in observation, construction, expression, and reflection.

While the mind of the child should be nourished upon a course of study comprising an orderly presentation of the field of knowledge in its elements, the special aim should be to provide an opportunity for the exercise of all his powers, mental, moral, æsthetic, and constructive—thru good instruction and wise discipline—and to promote the health and development of his physical being.

What is secondary education? Former United States Commissioner of Education Elmer E. Brown says the purpose of secondary education is

> to raise all subjects which it touches to the plane of science by bringing all into the point of view of organizing principles.

Hanus thinks:

> The secondary school should especially promote the discovery and development of each pupil's dominant interests and powers; and should seek to render these interests and powers subservient to life's serious purposes, and should make possible the participation in the refined pleasures of life. The serious purposes of life are, first, self-support, or, when this is unnecessary, some worthy form of service; second, intelligent, active participation in human affairs. The refined pleasures of life are found in the ability to participate with intelligence and appreciation in the intellectual and æsthetic interests of cultivated men.

The contrast then between elementary and secondary education is that elementary education is given to the organization of the instincts and impulses of children into working interests and tools, while secondary education has as its end and aim trained individuality, which trained individuality recognizes its obligations to and dependency upon other members of the social group.

Lest it be thought that no recognition is here given to the fact that the elementary school is the finishing school of the masses, let it be observed

that, whether the student purposes to prepare or to finish in the elementary school, the ends of the elementary school do not materially change. The presentation of the whole field of knowledge in its elements and the training of all the powers—mental, moral, æsthetic, and constructive—will cover a finishing or a future purpose. Vocational aims to be realized in the elementary school or to be realized in the future determine the stress of attention to be placed upon the cultivation of a given power.

Because of satisfaction with the existing order of things the purposes of neither the elementary nor of the secondary schools have been fully realized. All agree that they yet remain to be harmonized.

Not until recently has attention been given to individual aptitudes and capacities. The course of study and the school organization were based on the assumption that children were normal, on the supposition that all had the same latent powers and talents, and that it only required education to draw out and to bring these powers to a high standard of proficiency. The theory seems to have been accepted that pupils did not come thru school alike because a sufficiently hard pull had not been put upon some of the latent potentialities. Of late, there is a suspicion that some powers are latent to the vanishing-point, and undoubted evidence exists of power plus in certain faculties of the bright child.

The provisions now made for the subnormal and supernormal as well as for the normal child, the shortening of the promotional period, and the introduction of group systems mark a distinct educational advance in individualistic treatment.

An increasing dissatisfaction with the inharmonious relations of elementary and high schools, together with an appreciation that neither school was accomplishing what it should, has brought about many reforms in the past twenty years. The report of the Committee of Ten in 1893 for the first time set a national standard for the high school. It demanded many important reforms—the most significant in connection with the subject of this paper being the extension of certain well-recognized secondary-school subjects down into the elementary grades, the departmentalizing of some work below the high school, and a closer articulation of the elementary and the high school.

The report had a wide influence, but the conviction has gained ground that complete reform can come only with a complete reorganization of the school system. In 1905, the National Education Association appointed a standing committee on a six-year course of study for high schools. A six-year course for the elementary and a six-year course for the high school is believed by many to be a solution for the vexed questions of the interrelations of the two schools.

The public school is, as Calvin Olin Davis says in *High School Education*,

subject to indictment by the grand jury of public opinion on the following points: (1) the curriculum is overcrowded; (2) there are duplication and waste in administration; (3)

there is little correlation of subject-matter; (4) exaggerated attention is given to unessential and impracticable topics; (5) many topics now presented have no legitimate place in any curriculum; (6) pupils are overworked; (7) the course of study is inflexible; (8) there is no close articulation of the elementary with the high school; (9) individual tastes and capacities are not rightly considered; (10) promotions are based upon an unsound principle; (11) discipline is unsuited to the stage of development of the pupil; (12) teachers are improperly equipped; (13) pupils are influenced by too few different personalities; (14) methods of instruction are unpedagogical; (15) the study of many secondary subjects is postponed beyond the proper time for their best presentation; (16) work is not effectively vocational; (17) enormously large numbers withdraw from school; (18) insufficient attention is paid to the retarded pupil and to those of superior ability; (19) there is not sufficient handwork; (20) specific trade instruction is lacking; (21) the whole system is over-mechanized. . . . . This bill of indictment is being examined point by point and a true bill is being found.

While some of these unsatisfactory conditions are found thruout the entire system, and some in elementary or high school alone, the great majority of them apply to the seventh and eighth grades. Here is where reform is most seriously needed. It is believed that the rearrangement of the work and of the administration of the seventh and eighth grades, and the readjustment of the other grades to the new plan, would do away with most of the evils and inconsistencies with which we are now confronted.

The demanded readjustment has given rise to the idea of dividing the present twelve-year course at the sixth instead of at the eighth grade. Six years are thought to be sufficient to do the work demanded of the elementary student, and it is thought that the seventh and eighth grades should assume the character of the high school and adopt its forms and methods. It is difficult to show that the aim of the seventh and eighth grades differs in any essential from that of secondary instruction. Progress from the sixth to the seventh, or from the seventh to the eighth, should mark an increase of mental power. If the work in these grades is poorly arranged, or if these grades are wrongly administered, it may be expected that the student will find his school work lifeless, tiresome, and aimless. Compulsory education may keep him in school, but it cannot interest him. The student is present, but not participating.

Puberty is either close at hand, or already a vital factor, changing the pupil's physical make-up and mental characteristics, altering his life-interests, and widening his horizon. The student wants to put away childish things, he wants recognition of the fact that he is entitled to the *toga virilis*, together with all increased considerations of his personality attendant thereupon.

A change of administration will be demanded if secondary education is to begin with the seventh grade. Dr. Davis in the work above cited states:

There are four distinct methods of organization and administration that may be employed. Each offers unique advantages. Each lends itself to adoption *in toto*, or in combination with the essential elements of each of the others. These four methods are:

1. Continue the external form of the school as it is today, but introduce into the seventh and eighth grades the principles now obtaining in the administration of the high school. This would leave the elementary school outwardly in much the same condition as today. A modified form of departmental teaching would be provided, an enriched curriculum, a closer approach to the idea of student responsibility, and a better promotional system.

2. Bring the seventh and eighth grades into the high-school building and organize and administer all work above the sixth grade as a unit, both respecting external form and internal operation. This plan merely takes the seventh and eighth grades out of their present setting and merges them with the present high school. They thereby are brought fully under the principles dominating in secondary education. Departmental teaching, limited election of studies, scientific methods of instruction, a freer spirit of regulation and control, all are henceforth to be the birthright of the seventh- and eighth-grade students as they are at present of the pupils of the four upper grades.

3. Make a complete differentiation of schools and of subject-matter from the very beginning of the seventh grade. This plan implies a differentiation in aim, in subject-matter, and in buildings at the very outset. From the sixth grade the ways diverge. All work beyond this is organized in separate and distinct schools by themselves. In its complete organization, there will be seven distinct types of schools, the number varying with local conditions. These several general types are: (*a*) college-preparatory school; (*b*) manual-training school; (*c*) high school of practical arts for girls; (*d*) high school of commerce; (*e*) the business school; (*f*) the trade school for boys; (g) the trade school for girls.

4. Group the seventh, eighth, and ninth grades by themselves as a junior high school; and the tenth, eleventh, and twelfth grades by themselves as a senior high school. This method is adaptable to large cities where separate buildings and separate control may be had.

No attempt to study the relations of the high school to the grades below could be considered as touching the subject did it not analyze the various life-purposes of pupils and from these purposes determine the needs of pupils in both elementary and high schools, did it not determine the progressiveness of these needs thruout the grades, and did it not consider the stimulus and inspiration which courses answering the pupil's needs will have in his retention in school. Too often the only stimulus the high school exerts upon the grades below is the influence of its athletic achievements, or the inducements of its social life; but by answering a positive need the high school will exert a wider and deeper influence all down thru the grades.

With regard to their futures there seem to be five groups of pupils: (1) Those who will leave school at the end of the compulsory age and go at once into the world's work. Should the high school reach down to include the seventh and eighth grades it can offer in addition to the standard instruction: general industrial work for boys; general industrial work for girls; trades instruction for boys; and trades instruction for girls. These pupils are the large group in all schools, and it is not to the credit of our educational systems that they are the most neglected. (2) Those who will go one or two years beyond the grade of compulsory attendance, but will not complete the entire course. For these there should be the short courses enabling them to begin at the sixth year and prepare themselves for clerks, stenographers, and secretaries. There should be a choice of a short course in the

vocational and trades work fitting the recipient for various employments as an artisan. (3) Those who can complete high school but who must enter vocational life as soon as they have finished. For such there should be commercial, engineering, agricultural, manual arts, and household arts courses. (4) Those whose circumstances make it possible for them to select a vocation after leaving high school, yet who have not the means to go to college; these should have a general course covering many fields of learning, but demanding concentration on one or two lines of study. (5) Those who have the abilities, the desire, and the means to go to college. For these the college-preparatory course should be offered which should be of sufficient scope to prepare the student for such college courses as his future vocation will demand.[1]

In this reorganization of seventh and eighth grades, what subject-matter ought to be included? Most authorities agree upon: (1) English; (2) history, civics, and geography; (3) ethics and sociology; (4) physiology and hygiene; (5) arithmetic, elements of algebra, and geometry; (6) elementary science; (7) manual training, or domestic science and arts; (8) music and fine arts; (9) drawing; (10) voice culture, public speaking, and dramatics; (11) physical training.

What shall determine promotion to high school, whether at sixth or eighth grade? The promotion should be based on the consideration of the pupil's increased mental power and growth as determining his ability to do advanced work. It should not be based on knowledge tests alone. Knowledge can be tested by requiring the pupil to supply the data upon which he is to show his powers or to display his abilities. When a pupil shows sufficient power in the school arts to demonstrate that these arts are usable tools for higher education, he should be passed on. Not only should the pupil's knowledge structure be tested, but also the accuracy, facility, and rapidity of all mechanical processes based upon that knowledge. Promotional examinations to the high school are often pernicious in the stress laid upon testing memory instead of power. The stress put upon promotional examinations to the high school, attendant upon the eighth-grade commencement exercises, leads many pupils to feel satisfied with their attainments—pupils who would continue in school but for this emphasis on the final elementary grade.

Many small school systems are top-heavy in that they carry more high-school work, put more teachers in the high school, and have a greater per capita secondary expense than the elementary-school conditions warrant. The high school should not be built up at the expense of needed grade instruction. Educational sentiment should discourage this practice, otherwise the matter should be so regulated by law that the elementary school cannot be made to suffer in order that a display may be made at the top of the school system.

[1] Adapted from Charles H. Johnston, *High School Education.*

Pupil-advisers—teachers delegated to a guardianship of certain pupils' studies and progress—is not a new idea. But a great gain would accrue to pupils of the beginning high-school grades should such pupil-advisers take the former grammar-grade teachers into their counsels to learn the pupil's aptitudes, his abilities, and his weaknesses—but not his shortcomings. Let the rogues' gallery be kept from our public schools.

Altho not strictly germane to this subject, the amount of time spent in school is tangental to, and makes an appeal for, inclusion. Is not our school year too short? Would not a longer school year with shorter vacations be more rational? Considering the various new activities of the school, playgrounds and recreation centers, and manual instruction as well as mental, ought not the school week to include six days instead of five? For the same considerations, ought not the school day to be longer and with more varied activities? The school year in Germany has forty-five or forty-six weeks; the school week has six days; four school days have at least six hours, and two days have from three to four hours. Their school year totals fifteen hundred hours; our year is about ten hundred hours. Their total gain fs about five hundred hours. Are not outside influences threatening American education, and cannot we best counteract such influences by living more with the pupils?

In summing up some advantages to be derived from the new relations here discussed between grades and high school there ought to be noted that the six-year program according to its leading advocates

(1) Would put the seventh- and the eighth-grade pupils under one corps of teachers with a unity of purpose. (2) The seventh- and eighth-grade pupils would be on the way to a new goal before adolescence is complete. (3) High-school teachers would then understand why ninth-grade pupils are "numbskulls," mental vacuums, and dreamers of dreams. They would understand that the pupils are undergoing a physical change, and that their condition is not due to the stupidity of former grammar-grade teachers. (4) School arts could be carried on into higher grades with profit. (5) The first six years could be given to the acquisition of, and to proficiency in, the school arts. The seventh and eighth grades could get more culture work while learning the school arts, thereby making the transition between eighth and ninth grades a gradual one. (6) Secondary subjects could be studied continuously for six years. Culture in the fundamental subjects could be started earlier and continued thruout the high-school grades.

B. MORTALITY IN THE EARLY YEARS: SOME ADMINISTRATIVE REMEDIES

ADELAIDE STEELE BAYLOR, ASSISTANT STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, INDIANAPOLIS, IND.

The fact of mortality in the early years of the high school is so old and so well established that no proof of it is necessary. The small percentage of high-school pupils who complete the course has been a matter of newspaper comment and general public agitation. Some years ago when the

rate of mortality was much higher than now, the elementary school was held to be responsible. Pupils entered the high school unprepared in the fundamentals; they could not read, write, spell, add, subtract, multiply, and divide, and the high school, it was declared, could do nothing under those circumstances. So the elementary schools were regarded as the stumbling-block and vigorous and profitable measures were taken to vitalize the courses there, to make more complete the articulation between the elementary schools and the high schools, and in this way to reduce the mortality.

Departmental work was introduced into the elementary schools extending down almost to the primary grades. Latin, algebra, and other subjects, hitherto accepted as belonging wholly to the secondary curriculum, were projected into the grades. High-school methods in organization, athletics, and other lines were pushed downward, but still mortality, not only in the early years, but in all years, prevailed.

Then educators began to look above for the cause, and the teachers of the elementary schools could breathe an air of relief as the colleges and universities came in for their share of the burden. They were demanding certain set formal courses of study for admission and the high school must conform. Its curriculum had been fashioned to suit the college and university—so many pages of Latin, a certain amount of history, so many pieces of literature, and so much mathematics must be done, apparently by all, before the very, very small percentage of pupils who desired to continue their work in these higher institutions of learning would be permitted to do so. Thus college and university domination has been accepted as the cause of mortality in the secondary schools and the "professors" have been called upon to give an account of their stewardship.

The first movement was productive of good, for when the elementary schools went back from the extreme of high-school domination, as many of them have, and began to look to the pupils and their needs, they found many good things had been accomplished. Departmental work passed to its proper place in the highest grades of the elementary schools, in some instances working out with great profit to the young people the junior high school. High-school subjects were not retained with high-school methods, but where they persisted, it was because of a vital connection with the education of the children and the courses of study, in the hands of skillful teachers, in the elementary schools.

In this study of the weaknesses of elementary-school pupils, the curriculum was modified to introduce music, drawing, manual training, and domestic science, as a concrete side to reading, writing, and arithmetic. Children passed into the high school with more power to think and to do, and the rate of mortality was necessarily diminished.

The critical observation of the college and university in its application to secondary schools is too young for us to see positive results, but there is

every assurance that it will do good to both institutions and that again the rate of mortality will be lessened. Already the movement has brought out the valuable report of the National Education Association Committee on the Articulation of Secondary Schools and Colleges, in which a course of study is suggested that admits of larger latitude in the election of subjects, and its authoritative origin will encourage state and local officials to broaden their courses of study, at least sufficiently to conform to this report. One state board, and possibly more, following the general plan of this report, has already modified the course for its commissioned high schools, so it is possible for pupils to graduate from these schools without higher mathematics or foreign languages, tho not without both. However, the state board has made the wise reservation of allowing certain substitutions only under their supervision, when they are assured that the school has equipment and ample teaching force to do the substitute work successfully.

No doubt there will be weaknesses and many misunderstandings and misconceptions in this attempt to remedy what we have been pleased to call college and university domination of high schools, but it will help all, by calling attention to the courses of study long pursued by the higher institutions of learning and vitalizing them, as well as by improving the work of the secondary school, and again lessening the mortality.

But with this profitable agitation concerning the nature and work of the institutions from which the high school receives all its students and to which it sends a portion of its students, is there not another line of critical examination that might be more profitable than either of these in lessening the mortality in the early years, i.e., that of the character and work of the secondary school itself?

Does it serve any other purpose than that of a connecting link between the elementary school and the college, and if it does, is the purpose large enough to justify an expenditure of money and energy to bring about its fulfillment?

Do boys and girls at the most critical period of their lives need careful and close supervision and instruction to assist them in understanding their own needs and possibilities, their own capacity, and their own relations to life itself, no matter what their future work may be?

If people need a special institution for guidance and instruction from childhood to adolescence and young men and women need a special institution for guidance and instruction beyond adolescence, is there not greater need for a special institution for guidance and instruction during the intermediate years? It seems to me there can be but one answer to these questions and that an affirmative one.

There is no period perhaps in the lives of the boy and girl when the home has so little influence as at this particular time. Self-conscious, with new interests, new methods, new aspirations, an independence without judgment, a critical attitude toward what has hitherto been accepted

without question, these young people feel an extreme reluctance to submit to adult authority. They want to become leaders, organizers, dictators, members of special groups. Surely for such a transitional stage, the soundest, surest, safest, and strongest institution should be provided, and that institution the American high school.

What are some things, then, that are needed to make this high school justify the purpose for which society supports it? In the first place, its legality and the sources of its support should never be questioned. In every state in the Union there should be definite legislative enactment that recognizes the high school. As a necessary part of our great school system? Yes—but *more than that*, an institution in which is provided adequate building facilities, equipment, courses of study, teaching force, for every boy and girl of high-school age in this country, regardless of race, color, or previous condition of servitude; and furthermore, regardless of whether his future will find him in a college, a university, an office, or a workshop. It should be what it purports to be, the American high school open to all who rap at its doors for admission, and able to interest, instruct, and provide for all thru the continuance of certain well-defined purposeful courses of study and work, under mature and competent advisers and directors.

With a legal existence everywhere and definite funds for its support, the first thing necessary for the preservation of those who enter an American high school is the faculty. There can be no compromises here. Mature, experienced men and women, with scholarship and training, must constitute the faculty. If the mature, experienced teacher cannot be found with the college and university degree, take a few without. A high-school faculty is more in need today of people who have rubbed up against life in some practical way than of those possessed of degrees, but it is always in need of both, and the largest returns will come when both scholarship and life-experience are found in the same teacher.

This faculty must co-operate for the cause not only of every pupil in the high school, but of the community life. The Freshmen must be put in charge of its most able members; if any pupils must suffer because of weak points in the teaching force, let it be above, not below. In these early years, the pupils must be handled in small groups and so far as possible their methods of study and general lines of conduct must be directed by the faculty.

I think Woodrow Wilson, whom the Democratic party has just distinguished by a nomination to the highest office of honor and trust in this country, was the first to introduce into his institution a plan whereby certain members of the faculty were given the personal care of and responsibility for certain groups of students—a provision that every American high school should practice.

Salaries must be paid these men and women sufficient to secure a far greater degree of permanency in a community; and there should be com-

mittees among them whose specific business it is to study and report on every line of activity in the community, and how the high school can adapt itself to these special needs.

There must also be committees of the faculty to acquaint themselves with the home conditions of every child in the Freshman class, and ascertain sympathetically the attitude of the parents toward the work, the purpose for which they are sending their children into the secondary schools, and, in turn, acquaint the parents with the purposes and plans of the school. Public gala days that bring parents to the school for a little while will not answer. The school must be taken into the home.

High-school teachers' meetings should be called, not to discuss methods of teaching, but to talk about community life and spirit; not to discuss failures, but to present plans to retain boys and girls in the high school.

In this reaching-out into community life and the home, we will find that high-school pupils are accomplishing things outside the curriculum that may be recognized and taken into account, and that we may co-operate with factories, business men, and those in professional life, for the good of these young people. There are some things in the education of boys and girls that may be done better outside the schools and should be recognized in the schools.

Thru all this work, motives will be supplied for continuance in school, for, as the outside world becomes a part of the school life, placed there and administered by experienced persons, the young people of the high schools will not be forced to seek it at so early an age in a strange and unguarded companionship.

This same individual study of pupils, their home, community life, by competent and able teachers, will lead to the necessary and proper modifications of the curriculum, which is another important factor in the prevention of mortality in the early years. It will not be modified because some high school in a foreign land, or elsewhere, has done so, but because it must be made inviting and supply motives for the young people who enter the secondary school to take it up and pursue it. Vocational work of all kinds will always be a wonderful incentive if rightly understood and taught. Commercial subjects, manual training, domestic science, agriculture, and other industrial lines growing out of community needs and applied to community life will be essential, but these subjects can be made as stale and unprofitable as Latin, mathematics, or any subject of the curriculum. They are indeed fads when they are attached by school authorities who say: "We don't see much use in them, but there seems to be a demand that they go into the schools and we must keep up with the modern movement." But by this close contact with the pupils and their home life, this understanding of the community, the high-school faculty will vitalize the curriculum and exterminate all matter that might be denominated either "fads" or "effete."

Literary, dramatic, forensic, and athletic organizations that many times have been so ruthlessly thrust into the high schools to satisfy the restlessness of these young people will be conducted on straight and proper lines, because of the close relations and sympathy between pupil and teacher, and competitive affairs with other schools, if observed, will be straight and regular, with a willingness to accept defeat rather than a compromising victory. More things will be written and told about what the high school is, rather than what it should be, and the surprising number of pupils who remain thru all courses, rather than the mortality, will be the wonder. College and university men, always ready to accept the students who can do things, will open their doors gladly to receive applicants from the American high school, regardless of the course of study they pursued.

The old principle of the "survival of the fittest," under which we undertook to excuse the mortality in the high school, has been supplanted by the newer and better one of social service, social helpfulness, social value. Writers on secondary schools are approaching their subject from this standpoint and it is that basis, and that alone, on which the American high school can be preserved. The schoolmaster is not the dictator, but the servant, of the people. He is employed to follow out, not the whim or caprice of a few particular individuals, who want the schools fashioned after their own desires, but the general demands that spring from social and community sentiment. For the preservation of the youth in the American high school we must look down and up, but far more continuously must we look out and modify our work to suit the broader and more vital needs of society.

The maximum of success and the minimum of mortality can come only when the high school is recognized as an institution that is essentially American, and therefore maintained to do the greatest good to the greatest number in a great republic; a portion of an educational plan that, while it must be dependent to a large extent for its best results on the character of the instruction in the grades below it, and the influence of the institutions above it, yet whose curricula and plans of organization must be controlled by the demands of life and be sufficiently flexible to be adapted to community needs; an institution whose teachers must do more than simply equip themselves in scholarship, to give to boys and girls who have had an elementary education an insight into their own abilities and needs with the power of initiative in thought and action; a part of our school system that deals with young people at a very critical period in their lives when the parental influence should be strongest and most effective instead of uncertain and frequently impotent; an institution that calls for careful, sane consideration of its special needs in relation to itself and its student life and not in relation to some other high school in some other land or some other community; and finally, a part of a great social whole, that will always be affected by the general principles that control the larger unit, one of which is that change and new adjustments are essential to life.

C. THE SPECIALIZED OR VOCATIONAL VS. THE COMPOSITE HIGH SCHOOL

ARTHUR DEERIN CALL, DISTRICT SUPERINTENDENT OF SCHOOLS, HARTFORD, CONN.

Compared with the Latin schools of our earlier time, schools typified by the Boston Latin School antedating Harvard College by a year, by the Penn Charter starting before the close of the seventeenth century, our secondary schools of today represent a long wholesome advance in American thought and practice. These very pioneer schools, and their like, represent in themselves a rich and sane evolution. Our secondary educational system, like our other human institutions, is not perfect, but I have little patience with most of the indiscriminate destructive criticism of our public high schools. They have done, they are doing, they will continue to do a great service toward the promotion of the ideal at the basis of our democracy.

And after all, is it not by this standard that we must measure the results which we think we accomplish in our educational endeavor, this standard of the ideal behind our democracy? That is to say, does our system provide a full and free opportunity for every youth of whatever section or station to make the most of himself, to promote his own enjoyment in the service of the common weal? This, I take it, is the great aim of all public service: to provide the freest possible opportunity for each to work out his own happiness in the service of an advancing democracy. Any adequate discussion of an educational problem, it would seem, must start and end in this proposition.

Of course there is a difficulty involved in the word "opportunity" as used in this relation. "Opportunity" for what in detail? And how best is this "opportunity" to be provided?

It will probably be granted that our high schools, like our colleges, have overemphasized a bit their duties to a selected few. No one person is to blame for this, no one set of persons. It has grown largely out of a general haziness in the minds of most of us about culture, and a dense darkness regarding the specific needs of society. We have seen clearly that doctors, lawyers, clergymen, teachers must be provided. So, drawing upon the rich stores of the ancient world for most of our models, we found a way to manufacture these desirable persons fairly well, at least to the a bit complaisant satisfaction of the doctors, lawyers, clergymen, teachers. We forgot, or ignored if we remembered, that only 4 per cent of our population are professionally engaged. Or, if we knew the facts, we assumed rather *a fortiori* that the training which worked so well for the professionally inclined was the best possible preparation for all. Our great lawgiver, the General Emeritus in our educational army—Charles Eliot—still fervently contends that the best preparation for life is to prepare for college.

Now this theory has worked. Let us confess to the truth. It has worked impressively in important instances. We must tread softly here, for you and I are flowers of this very system. It should not be surprising, therefore, when we find opponents to innovators in this sacred field.

And yet we are awakening to newer connotations in the word "opportunity." We can agree with Great Britain's distinguished Professor Murray that a "deep decay has eaten into the study of classics in America," and thank him sincerely for recognizing the truth which we all consciously or unconsciously feel, that "the time has come which demands a deeper and more solid—and therefore, a slower—education. Great insurgent forces are at work in the United States and citizenship will require in the future a finer training and vision than in the past." In short, there is a wide area of genuine loyalty to the culture of the old school. This is quite true, and hopefully true.

We can also see, however, that the so-called "practical sense" of our people is very strong. The demand for a short, cheap, effective training to meet the demands of the field, shop, conveyance, trade, home, is a real demand. Given a demand, we are disposed in America to meet it. Hence the high schools, determining never to give up all that made glorious the past, are struggling to do their share to meet the practical situation in a practical way, to meet the need of the 36 per cent of our population engaged in agriculture, the 24 per cent in manufacturing industries, the 10 per cent in trade and transportation, and the 20 per cent in domestic arts, as well as those of the 5 per cent in our high schools who go to college. And so, as an outgrowth of our efforts to interpret more widely the significance of the word "opportunity" in these latter days, we witness the growth of agricultural, industrial, commercial, and domestic art courses on a wondrously increasing scale. We explain to ourselves that these serious, tho often ineffective, attempts aim to do for the industrial what we have been doing so long, and, for the most part so well, for the professional workers.

Granted that the high school must continue to meet both the old and the new demand, one immediate question to be answered is: Where shall these two lines of educational activity be carried on? To be precise, shall we have separate, special schools with a vocational bent for the practical courses, or shall we combine all secondary activities in one composite plant, albeit the courses be kept distinct? Thus our question is one principally of organization.

There are arguments on both sides. Indeed, both systems have been pretty thoroly tried in various and differing centers of our land. When I was asked to prepare this study, I at once settled upon certain fundamental theses—theses, I confess, springing from a pathetically limited first-hand experience in such matters, a large amount of a priori speculation, and the hypnotic suggestions from a few men whom I greatly respect. The theses were:

1. The tendency toward specialized high schools has gone too far in some quarters.
2. Economy requires less speed in this direction.
3. There should be less duplication of plant, laboratories, and the like.
4. Pupils should not be asked to go so far to reach the "special" schools.
5. Many facilities are now practically forbidden a large number of students because of the inaccessibility of the "special" schools.
6. The "special" school removes pupils from the "composite" school, hinders the promotion of democracy, and tends to promote class feeling, etc.

These theses have given me some interesting experiences. I found, for example, that they meet with enthusiastic support from the small cities, and with a rather generous disapproval from the large cities. In trying to analyze the reason for this divergency among the doctors, the conclusion seems justifiable that the large cities, being more directly interested because more acutely in need of industrial schools, and having the resources with which to act, have proceeded along the one shortest and most practical way and begun their experiments with the special schools. These schools are usually centrally located, launched with industrial fervor, but of very little significance, I believe, so far as real vocational training is concerned. Of course this last is not true of the trade school, but it is true of the industrial work in high schools. Officers of the large cities grant that most of the theses are true for small cities. I venture the question, If they are true for a small unit, are they not also true for a large city which is but a series of small units? So, at least for the purpose of this paper, let us forbear separating the problem into large and small city phases.

ARGUMENTS FOR THE SPECIAL INDUSTRIAL SCHOOL WITH A VOCATIONAL BENT

The arguments which I have been able to find urged in favor of the separate industrial school may be briefly enumerated as follows: It permits the economical concentration of equipment, avoiding unnecessary duplication. It permits of the concentration of the teaching force, enabling the work to be done with fewer instructors. It permits the concentration of individuality in the work, such as enabling the school to fit the English to the industrial pursuit rather than to preparation for college. The administrators of the regular high schools have not proved to be willing or competent to administer successfully effective industrial courses. From some sources I gather that the separate industrial school produces better results. One superintendent from a large city writes:

> The kind of work that is effective in industry or in business is not possible in a composite school. For this there are many reasons. First, it is impossible, unless the administrator in the building knows the field, and that almost never happens, because principals are chosen according to traditional ideals. Second, the efficient vocational school is possible only when the academical and vocational studies are correlated or dovetailed together. The student who is taking a business course needs a different kind of English in part and in practice from that one who is headed for college. Third, the effective vocational school has an entity of its own, for it must establish a bureau connecting with

those who employ the product. These seem impossible in a composite school. The fact is that it is impossible to secure the results in a composite school that are possible in a separate school.

The commissioner of education in Massachusetts believes

that the vocational school must be something set apart; that a vocational school must have its equipment, location, etc., determined by the conditions of the vocation for which it prepares; that a commercial high school and a high school for machinists should not be in the same building and cannot interchange equipment.

He urges that

a school for tailors would not use the same equipment as a school for carpenters and a school for carpenters would use little of the same equipment as that used in a school for machinists.

In general, Dr. Snedden doubts the element of validity in what might be called "general vocational training." He grants that every general or liberal high school should have opportunities for manual training for boys and household arts for girls, but that these should be simply a part of the program of general education, and that we should not deceive ourselves into thinking of it as "vocational." The composite high school is rarely going to give, in his estimation, vocational training.

And yet Dr. Snedden agrees to the objections against supporting different "classes of pupils," and "that it would be ideal if we could have all of our schools together." He says:

There is of course, not the slightest reason why several vocational departments should not be on the same block with the general high school. There would be some economy in giving such studies as English. On the other hand, most of those who discuss this sort of organization are not thinking of vocational education at all, but of some two-hour-a-day scheme of shop training, which, as my experience indicates, is of little value for purposes of vocational education. . . . . The question of the location of the vocational school is an important one. It will probably have to find its location in the neighborhood where the industry for which preparation is being made is carried on. It is the feeling of the business men of Boston that the High School of Commerce should be located in the heart of the commercial district, altho reasons of economy have hitherto prevented that consummation.

There is a sense in which we must agree with Commissioner Snedden's feeling, "that this question cannot be adequately discussed until we have made up our minds as to what we mean by the 'vocational school.'"

ARGUMENTS FOR THE COMPOSITE HIGH SCHOOL

The arguments in favor of the composite high school, or, as it is variously called, the cosmopolitan high school, the general high school, or the university high school, may be briefly summarized as follows: It promotes economy by permitting the use of the same heating plant, janitor service, study halls, social service rooms, and various types of equipment. There is no reason why the pupils in all courses should not use the same library, auditorium, gymnasium, lunchroom. There is no reason why all the schools should not have the same supply-room and be run by the

same business manager. An argument which has often been overlooked, but a very important argument in favor of the composite high school, is that, because of its accessibility and all-round equipment, it lends itself more readily to the use of the evening schools with their varying demands. The composite high school provides articulated courses which enable children to change easily from one course to another. The composite high school presents various life-preparing opportunities, and for this reason is more attractive to boys and girls, promoting a larger high-school population and a longer attendance. The composite high school promotes democracy among the pupils and among the teachers, avoiding cleavage into classes and the unpleasant results which come from caste distinctions. Another reason for rearing schools of the composite type is that the aims, in the last analysis, of the two types of schools are practically indistinguishable.

In presenting my theses to the various leaders in typical cities of our country, I received replies producing a profound hopelessness in my mind of getting any real assistance from those who are best able to advise. The leaders, even in the large cities, are not wholly in agreement about these theses. The comfortable thing about this is, however, doctors disagreeing, that we are at liberty to say some things which we ourselves evolve out of our own inner consciousness. At this stage of my mental undevelopment, I am convinced, first, that boys and girls do not usually follow those vocational lines that are preferred by them at the time of entrance into the special high school. Second, I am inclined to the belief that the high-school teachers are able to detect special abilities and to promote nascent tendencies as the pupils go thru the high-school course, and that such abilities and tendencies are made manifest more readily in the composite high school. Third, as one connected with the United States Bureau of Education, Dr. C. D. Kingsley, writes:

> About three years ago, while a teacher in the Manual Training High School, Brooklyn, I made a study of the geographical distribution of high-school students in that borough. We had six high schools, only one of which offered manual training. We found that the Brooklyn high-school students were regularly paying over $100,000 a year for carfare in order to reach the schools of their choice. The Manual Training High School draws to itself a very high proportion of the boys and girls on the park slope, Brooklyn, and draws students who desire manual training from the entire borough. Many of these students have to spend three-quarters of an hour or more upon the cars, both morning and evening, adding to the overcrowding of the cars in the morning, and spending, to reach our school alone, in the neighborhood of $25,000 or $30,000 a year. When you remember that many of these are young girls about fourteen years of age, and that all of them are spending time on the street cars that should be spent in walking and getting benefits of the fresh air, you can see how serious a matter it is. The carfare item is a serious drain upon the income of many of the families that find it a difficulty, at best, to keep their children in school.

To this, Superintendent Maxwell replies that it is "no objection," that "education is too cheaply and easily obtained." Another adds laconically: "Maybe it is better to go farther than to get a 'gold brick' near by."

In St. Louis, they have four white, and one colored high school, in all of which the same courses are offered. All have an equipment of shops, laboratories, and libraries varying only to meet the needs of the number of students in each school. The quality of the teaching corps in all of the schools is the same; thus the opportunities offered to a pupil in one high school are identical with those in the other high schools. The city is divided into four districts for white children, who are required to attend the high school in whose district they live. Thus the secondary system in St. Louis is based upon the principle of the composite high school, offering all opportunities for secondary education to all pupils. They believe that this is preferable to a system of specialized high schools, and emphasize the importance of promoting democratic ideas thru acquaintance and saner judgments which this system encourages. They have worked out with considerable detail the principles involved in the theses which I offer. Philadelphia has just moved a long way in this direction. Toledo is just completing two new composite high schools, each with a capacity of about 1,200; each of the I-shaped type, the central portion to be devoted to academical work and the wings to industrial laboratories, fully equipped. Other cities leaning strongly toward the composite high school are: Minneapolis, Portland, Ore., St. Paul, Rochester, Pittsburgh, Denver, Chicago, Milwaukee, Cincinnati.

CONCLUSION

There are great unsolved, but essential things which industrial education must provide and promote, such as the favorable admission of pupils to the industries, more practical experience as wage-earners, co-operation between the school and shop, industrial efficiency developing thru definite steps to definite occupations, that personal power most locally demanded, recognition by the colleges of high-school work in household economics and mechanic arts, reverence for our social institutions, as the courts, the law, the government, the church, the school, the home, the continuance of the educational process as far as possible, applied scholarship, a purposeful life.

Assuming that education must provide and promote these things, we have to grant that our educational system must meet the needs of those large sections of our population outside the so-called professions. In carrying out this program, we have come to grant that the whole of the pupil must be led to function, body, mind, and spirit; that we must cast our teaching more nearly in the terms of real life, motivizing as well as idealizing, vitalizing and energizing as well as intellectualizing and moralizing. Thus granting the importance of the aims of the older schools, we are finding a widening place for industrial education. Granting that the language, history, and number facts accumulated and being accumulated

must be preserved, and for the most part in our old-line schools, yet we are practically a unit now in insisting that industrial training must be likewise provided to meet the practical demands of our industrial life. Industrial courses have therefore become our fixed and accepted policy. Indeed, we are beginning to find that these two types of training are not of that ultimate difference which we at first supposed. We insist now that there is no industrial education worthy the name which does not end in a richer life of culture, and that there is no cultural education worthy the name which does not end in practical service.

But we have not, in our practice, been able to fashion a single course of education equally adaptable to both types of schools. So we separate the courses, roughly, into cultural, academical, scientific, classical, and industrial. In the organization of schools for the promotion of the best in our democracy, I believe in the composite high school, with courses leading to college, normal school, commercial training for boys and girls, domestic science for girls, manual and mechanical training for boys, each of these departments separate and under the direction of an expert, but all under one head.

So I am convinced after all that my tentative theses are in the main sound, namely, that there should probably be fewer specialized high schools, and pretty certainly that more attention should be given to developing composite high schools in various parts of urban centers, as the need may arise.

It is true that high-school pupils are problems in themselves. They are not to be treated according to a psychology of adults. There is no set organized psychology of childhood or adolescence. The teacher's most practical help is concrete interpreting experience, with real boys and girls. Human development means more than the acquisition of knowledge—it is a growth from within. The teacher's vital concern is to remove the obstacles from the way and to provide for those reactions which best promote this growth, representing the whole child in distinction from the body, mind, spirit, memory, feeling, or will of him taken separately. Different periods of child development present different demands upon the teacher's resources, but the demand in all periods is for a closer transition from the school to practical life, and that the child's activities shall spring primarily from his own past and be a generous expression of himself. Better physical bases, closer relation to vocations, and a greater harmony between school and real life are the most hopeful educational tendencies toward our democratic ideal of personal opportunity for all in a progressive society. I believe that the type of high school best qualified to promote education in the light of these principles is the composite high school.

D. SOCIAL ORGANIZATION IN THE HIGH SCHOOL

MILTON C. POTTER, SUPERINTENDENT OF SCHOOLS,
ST. PAUL, MINN.

There is surely no adjective so vaguely used or variously defined as the word "social." For its splendid generic sense the pedagogical pundits of our times delight to use it. But some use it in a specific restrictive sense, and often on the same page put it into violent antithesis with itself.

A great wholesome meaning for society is, all companionable people—those who serve their fellows. Social categories must differ—from philanthropist to paperhanger. But to be considered social any category should be embracing, not exclusive, but inclusive. The anti-social sediment is called the criminal class. The anti-social scum so often called society in various communities let me call the snobulous. Its members are not always necessarily snobbish, but consciously or unconsciously they exercise a toxic influence which all except the snobulous recognize as violently unsocial.

I am asked to discuss social organization, not snobulous organizations, in the high school. The latter have done their little worst to make ridiculous their juvenile initiates together with their fond and foolish parents. Our high-school corridors have almost ceased the breeding of snobs, and now seldom serve as the favorite promenade for the display of mystic jewelry and the sickly but ludicrous imitation of a college boy's strut.

The condemnation of secret social clubs in high schools by teachers, parents, and courts of law where appealed to, is practically unanimous. Greek letteritis brought forth a harvest of weeds and wild oats. We need not thresh that old straw here. It is history. But the assumption that organized manifestations of sociability among high-school students are evil *per se* is not unlike certain rather common American attitudes toward various adult activities like lodges or churches or camp-meetings. It is so easy on the brain and so satisfying to the conscience just to tag the whole thing "very bad" and then govern yourself accordingly. After that, one has no occasion to perplex oneself with annoying distinctions within the category upon which one has long ago put a definite tag. That is a clever arrangement for a lazy man with a large conscience.

But such a man should not be called too particular, by which word he is sometimes described. Far from it! His generalizations are often so sweeping and so cocksure as to pain and bewilder a really particular person.

> Said Deacon Ephraim Josiah McCotton:
> "All dances in Hell are begotten."
> Said Dick to Miss Bly,
> "Never mind the old guy;
> To the pure almost everything's rotten."

Now your normal healthy high-school boy is sure to "do some marvelous doings." And it won't help him any for us to swamp him in our moral

and polite generalizations. I think that much of our trouble in high-school management comes from being terribly shocked at some things which boys do as unconsciously as they carry their hands in their trousers pockets. To assist in organizing a boy's social activity will make him a conscious social being. A policy of repression will make him a puppet or a reckless rebel.

Two or three years ago Principal Lasher, of the Erasmus Hall High School in Brooklyn, N.Y., before the Department of Secondary Education, and Principal Johnson, of the Chicago University High School, in the *School Review*, described, at considerable length, numerous examples of student organization in their schools. Indeed, they handled the subject of fraternity substitutes in rather detailed fashion, which relieves me from doing so.

It appears from correspondence with several high-school principals, and from my own experience, that the strongest voluntary organizations in the high school are usually for one sex only. Partial segregation of the sexes, as practiced in the Cleveland Technical High School for instance, seems to furnish a broad basic condition for healthful social organization of a student body. Some years ago Dr. G. Stanley Hall said that segregation is always in some degree necessary for full and complete development, and to avoid a settled eviration of the boys. "There is a little charm and bloom rubbed off the ideal of girlhood by close contact, and boyhood seems less ideal to girls at close range."

There is considerable authority indicating the desirability of at least partial sex segregation above the eighth grade, such as:

1. Jordan, David Starr, *Higher Education of Women.* 1902.
2. Woods, Alice, *Co-education.* 1903.
3. Chambers, Will Grant, *Evolution of Ideals.* 1903.
4. Hall, *Adolescence*, Vol. II, chap. xvii, pp. 561–647.
5. *Co-education in the United States and Foreign Countries.*
6. Münsterberg, Hugo, *Psychology and the Teacher*, pp. 306–7.
7. "Co-education," *Baltimore School Board Journal*, October, 1911, p. 27.
8. Gove, Aaron, "Co-education in High Schools," *National Education Association Proceedings.* 1903.
9. Small, Albion W., "Co-education in the University of Chicago," *National Education Association Proceedings.* 1903.
10. Harper, William Rainey, *Decennial Report.* 1903.
11. *Riverside Report on Segregation.*

Partial sex segregation in many high schools is slowly growing merely as a convenience in program organization. The coming of the high-school shop, kitchen, and gymnasium has polarized the young people as to these subjects and has necessitated the segregation of boys and girls in some other classes in order to make feasible their segregation in these.

Further, the tendency toward sex segregation in adolescence is well illustrated, if not proven, by the spontaneous fraternal organizations

which have naturally developed along sex lines in all high schools where the administration has been too academic or the teachers too indifferent to originate or supervise proper social activities. It seems as tho the boys and girls naturally and unconsciously endeavor to separate themselves in their spontaneous organizations so as to make more formal the occasions of their social intercourse. No one can be blind to certain dangers inherent in that tendency and in those organizations—but no one not blind will fail to see the fact and to reckon with the good that is in it, when assisting students in organizing their clubs and societies.

We are the administrative agents of a new institution. The twentieth-century high school presents totally new features and problems to the executive.

Yesterdecade the high-school teacher just out of normal or high school engaged herself almost exclusively in keeping up with the bright pupils in book-learning and in finishing the last pages, if possible, a little ahead of the class. Today your boy is lucky if he gets two or three teachers whose excessive erudition does not forbid their remaining within calling distance of his cries for help. The former teacher was a business competitor of the "clever scholars," as was each "scholar" of every other. The recent type tends to form alleged high-school "faculties" with a school life distinct from that of the "student body." Meanwhile the need for social leavening grows greater.

The membership has changed. With high-school enrollment increasing from three to four times as fast as the total population in the past two decades in forty cities examined, a more varied membership is discovered than formerly. By the same token, the demand for effective mixing processes grows imperative.

The place of the high school in popular thought is changing. Today nearly every citizen is a loyal constituent of our "peculiar institution." No legislators or governors are today discussing the familiar nineteenth-century question, "Should the people be taxed for the education of the few above the common school?" This public faith in us imposes upon us the public duty of socializing the unsocial.

The high-school functions are changing. From having been purely a collegiate preparatory school for a very few, entertaining within its gates sundry ambitious "district-school teachers" in the making, and various others who were not old enough, or well enough, to do something more worth while, it is rapidly becoming a receiving-station and motivating agency for the final output of the common schools, which makes desirable the introduction of natural acquaintance opportunities in the very first year of high school.

A committee of representative mothers phrased it this way a few weeks ago:

The first year of the high school discourages most of our children. In the last year of the grades they are coaxed and loved to a hothouse rapidity of growth. Then suddenly they are plunged into a chilling atmosphere of tutorial indifference which causes most of them within the year to stay away from the great, new, cold, strange school. High-school teachers and first-year children should meet oftener outside of recitations or study.

A school official put the other side like this:

No right-minded people approve of school parties. It is hard to conceive of a dance in a public-school building which is not a public dance. The proper school relation is a business relation, not social or intimate in any way.

One of the strongest and most conscientious high-school principals I ever knew told a boy in my hearing, "You didn't come here to play. School is business." He was wrong on both counts I should say, or at least partly so. The boy did go there to play in all likelihood, and a large leaven of play in his teachers would likely have saved that boy.

A school is no part of the factory age. Difficult as it is to maintain consistent order and at the same time avoid mechanizing the "business" of an overgrown city high school into rather inhuman perfection, there are many great hearts who see and sympathize with the still pitiful baby girl or boy beneath all adolescent vanity or vulgarity.

Only if you call the household activities of a colonial fireside "business" can you so denominate school life. Its business is but one detail. It is more than business. It is art. It is politics. It is love. It is play. It is a cross-section of all life. That is the vision of a modern high school, which warms the hearts of consecrated men and women, and without which the children perish and are found in the thereafter working in laundries or driving laundry wagons.

It is too easy for me to say I am simply a mental mentor to the young. Such a conception of my functions saves me my afternoons and evenings free from their intrusion. But I see across the hall a popular white-haired maiden, upon whom the bloom of age has softly fallen in silver glory, giving every afternoon, and all of it, to the students' affairs; and I wonder. She says that she considers her classroom work the least of her duties, and still more the least of her privileges. She believes that every real teacher in the high school should feel the imperative call of the young upon her afternoon time and should find it practically impossible to get away before the building closing hour, at five o'clock, any day. She is a great teacher. Her kind will before long possess the twentieth-century high school. For the youth of the land carry them in their hearts, and the young people make the schools.

The graduates from such schools do not forget such teachers. They return again and again, carrying gifts of buildings and statues and books, of children's fields and baths, and the frankincense of noble thoughts and kindly feeling. At the afternoon parties (for they are never held at night and never outside the high-school building) there are mothers and fathers

who delight in the children and who help them, in folk games or graceful cotillions, to forget the clod of clay which cumbers the aspiring spirit and to bring it into unconscious co-operation toward the purposes of school life and of all life. Happiness is a habit. Habits are perfected by practice.

Our Puritan educational heritage has given us so much of good that one must regret the necessity of admitting that their theory of life as a "preparation for death" not only shadowed the life of my ancestors but caused their schools to become detached institutions which were not a part of life but merely "preparation for life."

We all know teachers and officials today who hold this limited conception of the school. Such a school is an isolated pool in which the little fishes grow sleek and fat and self-satisfied. Upon a day they are thrown out into the great waters of the life stream to sink or swim or gasp along the shore. They would be more apt to swim, and swim in deep water, if their youth were spent in a bayou, or living tributary of the main stream.

Not only should the commerce department, the apprentice committee, or the vocational committee in any high school keep the adult life of the community in constant touch with the school life; but the social committees will find the same practice invaluable in giving the young people who most need it the proper strength and ease of approach, the unconscious simplicity and poise, which these young ones will find so valuable in the larger life. Fathers and mothers will be found who will give their leisure, or even business hours, for the sake of other people's children as well as their own. Indeed, they now recognize that they cannot corner the social virtues for their own alone. The social graces are ubiquitous. They grow in one by diffusion among many. High-school fraternities were violently unsocial. But they pointed the way to social organization, co-operating with fathers and mothers.

Evidence of abiding life-interest in high-school affairs always delights my heart; but particularly so, if manifested by a Greek-letter convalescent. The writer of the following letter was one. She graduated from the Centennial High School in 1910, shortly after the surrender of all outside charters and an agreement for the future to organize only inside clubs or societies, with Centennial authority, and always including some high-school teacher or teachers.

BELMONT, MASS., May 24, 1912

Mr. Milton C. Potter, Pueblo, Colo.

MY DEAR MR. POTTER: I am going to write you a long letter. You want to know about this school, I know. I have been for some time in Belmont, Mass. Belmont is one of the numerous small towns close to Boston. My uncle is the superintendent of schools here. Thru his efforts an organization was formed known as the "Belmont High School Athletic Club." I am sure you will be interested in knowing about this, and I want to tell you what I can of the movement.

The high school owned no athletic field, and no ball ground was accessible. In the course of a few months after the formation of the high-school club, Mr. Underwood,

a prominent man of the town, noticed the lack of athletic fields and equipment. Altho he had no children, and could not profit directly thru it, he gave to the high school a large field to be used for athletics only. The boys were at once interested and began work grading the fields. At present they have a "gridiron," a baseball diamond, tennis and croquet courts, and a fine running-track.

The field is about a mile from the schoolhouse, and a mile is too far to walk in football togs, and so the boys decided that they should have a clubhouse. Again Mr. Underwood became interested. The services of an architect were secured. The architect planned for a small clubhouse, built in Swiss chalet style. When the plans were accepted they were turned over to the Manual Arts Department. The work from this time on was done by the boys. Master plumbers, masons, an carpenters were engaged to show the boys how to work. The interior is finished with panels and beams. The panels are hand carved, as also are the porch supports. The huge fireplace has a pair of andirons of iron, representing a claw holding a football. The boys made these in the forge-room. The curtains and pillows were made by the girls in the sewing classes. The boys made all the furniture.

The clubhouse is not large. It has an entrance hall and clubroom, and is well equipped with baths, showers, and dressing-rooms.

The "Athletic Club House" is the pride of the high school. Each student feels a personal interest in it, and it is pointed out to strangers as one of the landmarks, almost rivaling Bunker Hill in importance.

Sincerely yours,

ESTHER LEONE HUNT

In the new high school nearly every teacher spends nearly every afternoon in some sort of extra-classroom activity. A strong student's volunteer weekly schedule might look something like this:

Mondays:	Euterpean Society (or some other musical club)
Tuesdays:	Cinderella Club (or some other dramatic club)
Wednesdays:	The Smithy (or some other crafts club)
Thursdays:	The Pnyx (or some other debating club)
Fridays:	The Duck Party (or some other party. In one western college town the young people call the high-school classes "Oneies, Ducks, Trips, and Quads," splendidly ignoring the college phraseology.)

The dear young scamps in the high schools are bound to do some scampering. It's our business to keep up with them and make the scampering count for something. Our young people are quite willing not to ape the adult four hundred if something more worth while is presented. With their final recovery from the imitative languors and silly vices of the grand society women and young men of the new rich, our boys and girls must come into their rightful heritage of noisy joy and merry work in the spirit of play.

For all of these occasions the young people will do their own decorating and serving and subsequent housecleaning. I know this is not impossible for I saw the third-year girls in a St. Paul high school eagerly grasping at the chance to wait upon the graduating class at their last banquet. Indeed the waiters in the café of this high school are all of them high-school girls of the very finest type, who receive nothing whatever, not even food, in return for their splendid service. Those young ladies are many of them from

very affluent homes. All of them, the brightest and the slowest, the richest and the poorest, are the instruments and the beneficiaries of a fundamental social education. But it is not hard to shut your eyes and see the shocked face of some dear mama of the μμμ variety as she indignantly exclaims: "No one shall ever make a daughter of mine do such a thing."

Just so, dear lady. No one in the new high school would ever attempt it.

But the cleansing waters of unselfish service flow most freely for boys in the games of the field and gymnasium. Manners are a fine art, considered as a way of living. Literature and history are a manual of manners. However, few boys will take a grandfather's advice, or profit from his experience. Therefore, literature and history unapplied do not suffice. First-hand condensed social experience is had on the athletic field. Athletics is a moral life-laboratory.

Everywhere in America some kindly lady with a mission in life must needs arise and view with alarm the "brutalizing effects of the dangerous games still criminally countenanced by high-school authorities." But the vigorous sports of youth, now properly supervised and co-operated in by the teachers, still cleanse the blood and tone the will, subdue the temper, and string up the attentive powers of the finest boys in the English world. Still they stand the most persuasive life-influence, the most appealing school memory, and the most powerful guaranty of social democracy in all our high schools. Because of them there is hope that the American boy of tomorrow may keep his boyish simplicity of thought and action long past the age when his brother of yesterday has become a wearied and wearisome man of the world. Any teacher in Harrow or Eton who succeeds, or remains at all, must consciously consider his most important work to be his active, happy, volunteer participation in the sports of the boys. There unconscious life-tuition holds most perfect sway. And in the long run character and not scholarship is the finest fruit of the high school.

E. WHAT THE PUBLIC MAY EXPECT IN DIVIDENDS: MATERIAL, CIVIC, AND SOCIAL

KATE UPSON CLARK, BROOKLYN, N.Y.

Theologians have deduced from sacred history and from analogy the theory that the Creator at first attempted the regeneration of the world thru the placing here and there of a good man. This experiment failed, because the good man died and his children did not continue his tradition. At last, Abraham was created, and was chosen to be the especial friend and ally of God, "because," says the record, "I know that he will command his children and his household after him, and they shall keep the way of the Lord, to do justice and judgment."

The preservation of high ideals from generation to generation in a whole people requires enormous racial force and insight. The great civilizations of old doubtless cherished the belief that the world would mount upon their shoulders to higher and ever higher things; and yet they went out like blown candles, until even now, as Wendell Phillips proved in his famous lecture on "The Lost Arts," we have not entirely recovered certain powers lost in their decline.

The chief instrumentality in our age and country for the perpetuation of our ideals is the public school; and one main reason why the ancients failed to perpetuate theirs is that they had no such schools. The author of *Gesta Christi* says that it is impossible to imagine the archons of Athens as taxing the rich in order that the helots might learn to read the Greek classics; or the Roman Senate setting apart a revenue providing teachers for the plebs and slaves. In our favored land, the rich are taxed so that the poorest may learn.

Not long ago an American capitalist, who has lived on both sides of the Atlantic, declared at a dinner party that he despised his country; that the government of the United States is the laughing-stock of all other nations; and that it is so honeycombed with sham and fraud that the structure even now totters to its fall.

"What do you think will follow—a monarchy, an oligarchy, or anarchy?" was asked him. He stammered some vague reply, from which it was gathered that anarchy would probably come upon us very soon.

Upon relating this conversation a few days later at another dinner, attended chiefly by young college men, one of them announced that he agreed with the capitalist. Since then, many others have been heard to express similar opinions.

The primary object of education is to so train the mind that it may, as Matthew Arnold says, "see straight and think clear" and may ultimately arrive at that culture which is "sweetness and light." The knowledge that education gives may be forgotten, but it gives also strong mental muscles, which, if their use is kept up, remain strong. An informed and intelligent mind is the first essential to a right judgment. Then, when the understanding is strengthened, the fallacy of the reasoning of the capitalist and the young college man can easily be shown and a wise patriotism instilled. Our children should know that, tho our public servants sometimes prove untrue, the people are, as a whole, honest. No country is controlled as much by public opinion as is our own; and that public opinion is generally right. When matters go wrong, we ourselves are to blame. We are too busy with our own selfish affairs to do our duty to the state. But from those whom the state has educated should come service to the state. In war, they would count it sweet to die for their country. In peace, it is just as much their obligation to lay their lives upon its altar, not all at once, as in war, but a little every week or every month; and the

sacrifice is even harder. No bands play. No crowds applaud. Slander and abuse are more likely to follow, but no less should the true patriot, as Browning says, "do out the duty."

It is therefore acutely necessary that, whether or not our children understand quadratic equations or foreign languages, they should be warned of the hideousness of intemperance and unchastity, the evils of bribery, the intricacies of blackmail, and the horrors of an unrighteous war, and that no other kind of war is possible between civilized nations. They should learn well the lesson that eternal vigilance is the price of liberty as much today as ever, and that because our forefathers cherished a beautiful dream of equality and democracy, and broke a rough, brave path toward its fulfillment, it is no sign that we shall move onward in that direction unless we constantly labor and agonize, even as they did, to advance nearer and nearer to it.

The first sheaf, then, which we should garner from the field of the high school should be that scholastic training which gives not only a fair amount of scientific and literary knowledge, but a disciplined reasoning power. Let it not be true of our high-school graduates that while "Knowledge comes" to them, "Wisdom lingers."

The second should be a broad and unwavering patriotism—a realization of their deep obligation to be a good citizen of what, with all its faults, is the best country under the sun.

Involved in this patriotism are many elements. Three stand out sharply.

The first of these is respect for law. In a land like ours there is no excuse for the outbreaks of lawlessness which occur from time to time. Bad laws can be changed by orderly process. In the greater part of our country such troubles are usually caused by foreigners. Since our public schools are the melting-pot for our thousands of aliens, as Mary Antin has so vividly pictured them in her *Making of a Citizen*, especial stress should be laid there upon obedience to law.

The second is the abolition of caste and class. Do fraternities and secret societies promote the formation of cliques and small, "select" circles, from which many are excluded, to eat their hearts out in grief and envy? If these societies do promote these most undemocratic distinctions, the teaching of a sound patriotism demands that they be driven out. Closely connected with this evil is that of race prejudice. Few of us are entirely free from this undemocratic and un-Christian weakness, and it should be stoutly fought.

The third element in the teaching of patriotism is the glory of honest work, and that every man and woman should be a "lifter" and none a "leaner." For those who can study no more after leaving the high school, the mastery of some vocation, or a fair preparation for earning fair wages at once is essential. If there is a vocational school near, that should be

attended. If not, the local high school should establish one or more vocational courses.

But the mere effervescent sentiment of patriotism counts for little unless behind it there is a pure and upright citizen. Scholarship without character is a curse. Horace Mann, in defining good citizenship, quotes the ancient statute of Massachusetts which was framed for the guidance of educators, and which sets forth this matter "in large and noble characters," thus:

> It shall be the duty of the president, professors, and tutors of the university at Cambridge and of the several colleges, and of all other instructors to exert their best endeavors to impress on the minds of children and youth the principles of piety, and justice, and a sacred regard for truth; love of their country, humanity, and universal benevolence; chastity, moderation, and temperance; and those other virtues which are the ornament of human society and the basis upon which a republican constitution is founded.

"The laws of morals," continued Horace Mann, "can be taught like any other laws, and are far more important than the laws of cube root. They are natural laws and always existed and depend on no religion. It disparages and degrades the subject to leave it to the teacher's option. We are bound," he concludes unequivocally, "to dignify it by making it a part of the regular course of study."

You have read of the ways in which these matters are managed in France, Germany, and England. The recent extensive referendum upon them in this country, in which probably many of those here present took part, revealed the fact that most of the teachers consulted, favored indirect ethical teaching. Thirteen per cent approved of religious exercises; 18 per cent appealed for a graded moral course. All agreed that "home influences" seldom harmonized with those of the school. The words of the teacher could scarcely be heard while the voice of the home was, as Emerson says, "thundering so loud in the ears." Gladstone expressed the matter almost as strongly when he said, "One example is worth a thousand arguments."

Undoubtedly the child receives powerful moral lessons from the thoroness, industry, punctuality, truthfulness, impartiality, and justice enforced in every good school, and from the cleanliness and kindness to animals required; but there should be something more. There are many other virtues to be taught.

There could be no objection, one would think, if our public-school children should be taught that they have not only a physical and mental but a spiritual nature to be cultivated. Let the child be a Jew, a Roman Catholic, a Theosophist, an Evangelical Christian, a Universalist, a Unitarian, a Christian Scientist, or what not, but let him be instructed that he should cherish some sort of a religion, devoutly and sincerely. Everyone who has any religion at all can testify to its worth and help. In a periodical

"important topic talk," very brief, but pointed, such advice might be given. It was not a sermon, but a "word fitly spoken," which was said to be "like apples of gold in pictures of silver."

But at the very base of a good citizen's civic efficiency, no matter how patriotic he may be, nor how moral and religious, lies the great concern of his health. A nation of sickly, degenerate men and women is bound to go to the wall. Not even the faithfulness nor the iron will of an Abraham could save them. Whatever else our young people do or do not bear with them from our high schools, they should take a knowledge of their own bodies, and of the fundamental laws which govern health and disease. In many modern schools an attempt is being made to have the teacher of hygiene, in addition to the periods in class, give to each child under his care a special half-hour alone for a more searching and intimate interview than would otherwise be possible.

We cannot turn out profound scholars or finished orators or statesmen from our high schools; but even at sixteen or seventeen the face may be set in the right direction, and every boy or girl who graduates, or takes even a partial course there, should have had awakened within him a taste for good literature, which will keep his education going on thruout all his life.

In a line with this important acquirement is the appreciation of simple pleasures. Many young people are infected with the idea that unless a large sum of money is spent, unless one can have an automobile, or high-priced theater- or opera-tickets, with indigestible restaurant suppers, and other luxuries, there is no pleasure. A happy home, no matter how humble, as the poet says, and the simple diversions which are within the reach of all, are usually the source of the deepest delights of life, and this cannot be too early impressed upon the young.

From our high schools should pour into society, also, an element of sanity and bravery under the bewildering trials and worries of life. There a training should be given which will enable a man to meet "ill luck," not with an imbecile smile, perhaps, but with a courage which will keep him from breaking down physically or morally, or from that last resort of the desperate and ill-balanced coward, self-destruction. Teach him to turn his face habitually toward the bright side of life, and to join in the glad cry which Browning put into the mouth of his David:

> How good is man's life, the mere living! — how fit to employ
> All the heart and the soul and the senses forever in joy!

But he should be equally instructed that it would be a

> Poor vaunt of life indeed
> Were man but formed to feed
> On joy,

and that sorrows must come and must be manfully met. With this stalwart courage and with good common-sense added, that rare gift, for the

teaching of which we have, alas, no textbook and no chart, one might be a useful citizen with little education besides.

Calculate as carefully as we may, our best-laid plans may not result in producing these qualities. You have heard of the little girl who prayed one night, "Please, God, make seven times six forty-eight," and, when her astonished mother asked for an explanation, said that she had written it so in her examination and she wanted it to be right. Seven times six will remain the same to the end of time, but as yet we cannot with such mathematical precision adjust our educational means to our ends.

Thus the dividends which the public has a right to expect from our high-school graduates in return for the vast sums expended upon them are: first, a fairly well-filled and well-disciplined mind; second, a sound and practical patriotism, showing itself in obedience to law; in sturdy industry and self-support; and in a genuine and brotherly democracy, free from snobbishness and race prejudice, and ever trying to help the less fortunate members of society; third, a good moral character, touched with a certain spirituality and at least a respect for religion, if not an experience of it; fourth, good health; fifth, a taste for good reading; sixth, a right perspective regarding true pleasure and plain living; and, seventh, a manly optimism in the face of defeat and trial.

These are the great essentials, and whatever must be left out, these must be somehow attained. Walter Pater says of Watteau that he painted scenes to the life, but he had "a marvelous tact of omission." That is something we need in laying out our high-school courses.

In addition to these more significant features, there are certain minor requirements which may be more important than they seem.

One of these is that the high-school graduate should be able to write a correct and presentable letter, with his address and the date always upon it—the latter not spelled out.

Another is that a degree of refinement should mark his manner. It sometimes seems as tho a high-school teacher should be chosen quite as much for his or her gentleness and politeness as for scholarship, and should thus afford a model in this respect. One sometimes sees a group of high-school girls on a street corner, all chewing gum, some of them with arms akimbo; some perhaps with paint and powder on their faces, and with those compressed waists which augur so ill for wifehood and motherhood; and all of them shouting and emitting loud peals of laughter; and it is a painful experience for one who loves his country. Let them chew gum if they must, but always in their own rooms at home and behind closed doors. As for unrefined attitudes, artificial complexions, tightly laced waists, and loud talk and laughter, these can surely be modified or even eliminated during a high-school training.

When the group is of boys, smoking cigarettes and interlarding their conversation with oaths and obscenity, the case is still more distressing.

Their health lessons should have shown them the dangers of nicotine, and their moral teaching, the vulgarity and sin of evil conversation, but what they need most is a better example from men whom they see and whom they are bound to copy.

The third plea is for better voice-culture, not for singing but for speaking. The American voice is too apt to have a quality which may be called "acridity," and no matter how fine a mind or pure a spirit may lie behind it, that voice is the voice of ignorance and vulgarity. The boy's oratory may have had a greater basis of fact than his hearers thought when he declaimed of the Pilgrim Fathers: "What do I hear? Is it the howl of the panther or the screech of the cat owl? No, it is our fathers at prayer." Too many of us have in our voices, even in prayer, more than a trace of "the howl of the panther" and "the screech of the cat owl."

But the final test of an education, as President Eliot has told us, is "continuous growth." Unless our high schools have given to their graduates the ability and the will to "climb" as long as they live, our system has failed in one of its most vital points.

F. THE WORSHIP OF THE "STANDARD"

WILLIAM HUGHES MEARNS, SCHOOL OF PEDAGOGY, PHILADELPHIA, PA.

Most principals and teachers agree that the "standard" of the school must never be lowered. Pupils may come and pupils may go, but the "standard" must be kept up forever. And undoubtedly pupils do go. At the end of every term-examination thousands of normally healthy youngsters drop out of the high schools like pits from a patent cherry-stoner. As a class they look much more useful than cherry pits. Judged by their report cards, one would expect to find them anæmic, stupid weaklings; on the contrary they are frequently a full-blooded lot, athletically built; they are apt to be good dancers, amateur actors, officers of social clubs, alluring and rhythmic cheer-leaders, Beau Brummels and Madame Pompadours. Their schoolroom ingenuity, full of life-giving joy for their fellows, is fatal to the teacher with a weak heart. They are clever of speech and remarkably well informed on matters not in the school curriculum—a thoroly likable group that has had a serious falling-out with the school "standard."

In a first-year high-school class I once found these youngsters composing 75 per cent of an algebra section. Thirty-six out of forty-eight had not come up to the end-of-the-term "standard."

The teacher, a man noted for holding a high standard, explained:

> Early in the year I discover the group in the class that can "get" algebra. It is usually about 25 per cent. To these I give my whole time and let the remainder shift for themselves. I told these fellows—the 75 per cent—frankly in the beginning of the

term that unless they got up steam we'd leave them behind in June. The result shows I was right. Why, there's no use wasting time on that crowd; they couldn't get algebra if they stayed here a hundred years!

I politely agreed with him. Then he went on to tell me how one of his former 25 per cent boys had just missed Senior wrangler in mathematics at Cambridge. That school is famous for its mathematic phenomenons; but the June reports showed that 51 per cent of the first-year class had failed in algebra.

The "high standard" of a famous Harvard preparatory school is maintained by a similar method. The prospectus announces that in all the years of its existence the school has not had a single failure in the Harvard entrance examination. Anyone sent up, they claim, is sure to pass; but care is taken that only those sure to pass are ever sent up. If there is any doubt about the boy, he does not get the chance. The hard-earned reputation of a dividend-paying school is the really important thing. To save some young chap from becoming a Harvard man may, after all, be a worthy act. The matter is more serious, however, when it affects the educational lives of children. Not so long ago, when ceremonious examinations were in vogue for admission to city high schools, the grammar schools that put thru the greatest proportion of successful applicants were given the highest official standing, and the only measure of the success of a grammar school was the percentage of pupils put thru the high-school test. Certain schools were soon famous as "100 per cent schools," those that year by year recommended none but successful candidates.

The high standard of the school was always at stake. Therefore rigid preliminary examinations were held to weed out those who might fail and so injure the record of the school. Many principals declined to consider a boy or girl who could not achieve an average of 80 per cent in the preliminary test, altho the city minimum was frequently as low as 65 per cent. The reputation of those institutions still lingers today. One of these, whose standard was almost notorious, gave searching written and oral examinations to every child that sought to enter the school at any grade, cleverly excluded the unclever—put them off on someone else, always with the explanation that "the pupil does not come up to our standard"—and openly advised the older pupils to stay two years in the highest grade in order not to risk a failure in the high-school test. There was rejoicing, I fancy, when a weakling dropped out thru overpressure, or when a slow pupil decided to learn the office-boy business.

As the rivalry among these schools grew more intense, one set of grammar schools held Saturday drill sessions, some began daily at eight o'clock instead of nine, and others declined to teach important examination-subjects like arithmetic and grammar until after the four-o'clock dismissal. "Home-work," aimed to hit possible examination questions, was added to the load. One principal had the requirements of the course of study

printed in condensed form for memoriter work, with a catechistical question-and-answer guaranteed to beat the most tricky examiner. These were sold to the children and used in the classrooms in lieu of textbooks. The public praised the work of such schools, the pupils were proud of the record, until a wise superintendent (I cite the case of one city) abolished the cram-examination. The old method of fact-grinding still continues in some spots, altho recently a district superintendent put the elimination and retardation test on one or two of such schools and showed a frightful dropping-out of pupils. In one case two hundred fifth-grade pupils had dwindled to seventeen high-school candidates. But each of the seventeen was a winner.

I recall how carefully I watched the five eighth-grade pupils that with others some twenty years ago made up my first experiment in teaching. Solely on their record at the final examination depended the standing of the whole school. I was early impressed with the fact that each of these five young persons carried with him 20 per cent of possible failure. When the likely-to-fail chap spoke hopefully of going to work, we stood ready to help him search the want advertisements and provide an irresistible letter of recommendation; when the clever sure-to-pass girl spoke carelessly of leaving school, we set to work upon her like a boss politician upon a wobbly voter. The boy or girl was really not important; the "high standard" of the school was wavering in the balance.

This story is given at some length because the college-entrance requirements have for years forced the same sort of program on the high schools. In some instances a particular college with a monopoly of higher education has turned the adjacent high school into a purely mechanical preparatory-to-college institution. Courses that do not lead to college have had a social taboo put upon them. And to secure good results at the entrance examination, really good students have been permitted to spend seven or eight years in a four-year high school—after finishing course A (four years), the pupil declines graduation, and completes course B (three years). The reputation of such high schools always stood unimpeached because their graduates won a large share of the competitive scholarships. Seven and eight hours a week of college-preparatory Latin crowded the more important English; physical training was practically eliminated; and there was no place for domestic science—or indeed any science—or for vocational training, local history and geography, social and economic studies, or any other subject vital to young people, but not included in the college-entrance requirements. There were no study periods nor helpful preparation in class for the next day's work; and the home study was a test of endurance. The result was a daily panic and a tremendous rush to the exits.

"All persons more than a mile high will leave the courtroom," said the King, looking severely at Alice, at which there was a tremendous clapping of hands from the audience, composed largely of private tutors.

The most ridiculous instance that I know to show the sacrifice of the individual to the high standard of the school is that of a young woman whom we shall call Irene Jackson, recently dismissed from an eastern high school. She was thirty years of age. She had spent fifteen years of her life in that high school trying to come up to the standard. For seven years she was a Freshman, for five years she was a Sophomore, for one year a Junior—which leads one to suspect there was something wrong with that Junior year—for two years a Senior. Probably she would have been there yet, competing with her grandchildren—for Irene never achieved a high-school diploma—had not the school commissioners abruptly dismissed all high-school students that had failed twice of promotion.

One can understand how Irene might have become thoroly attached to that school and have joined vigorously in the campaign of the alumnae against any change in the course of study, altho it had permitted her to spend the best of her life at an impossible task. We can fancy her emerging from her fifteen-year trial like the little maids from school who "all unwary, come from a ladies' seminary, freed from the genius tutelary," but one could never consistently picture her singing with Yum-Yum, Pitti-Sing, and Peep-Boo,

> Everything is a source of fun,
> Nobody's safe, for we care for none,
> Life is a joke that's just begun!

For Irene Jackson, life was a joke that was well-nigh over.

The objection brought by the so-called classical high schools against the introduction of manual training is based on a question of school standard.

A high-school principal in a recent newspaper interview explained:

> All the traditions of our school are academic. To offer manual-training courses would lessen the time we must give to the book branches if we wish to maintain the high standard of our institution. Courses in commerce and other vocational and trade studies would have the same effect. As we cannot afford to decrease the value of the diploma of the school, therefore we do not welcome the sort of pupil that would elect such courses.

This exclusiveness recalls how Uncle Remus warned Miss Sally's little boy not to associate with the Faver's children:

> Dem Faver's chillun wa'n't no 'count fo' de war, en dey wa'n't no 'count endurin' er de war, en dey wa'n't no 'count atterwards; en wiles my head's hot you ain't gwine ter go mixin' up yo'se'f wid de riff-raff er creashun.

I am reminded here of a conversation I had some years ago with the author of a beginner's Latin book. In a spirit of helpfulness I pointed out that the chapter on Latin participles could be understood only by one who already knew all about the Latin participles, and that Latin was difficult enough in itself without furnishing further obstructions in a lesson-book. His answer was characteristic of the aristocratic ideal that objects to educating the "riff-raff er creashun." He said cheerfully:

Here's just the trouble with you educational reformers. You want to make things too easy for pupils. Children must be interested—that is the modern cry. And what is it leading to? A lowering of the standard of education all along the line. The whole value of that chapter on participles is its difficulty; we put the screws on early to sift out the unfit. When I studied Latin it was no sugar-coated pill. It was a rough dose, but it did the business.

No doubt it did do the business for all except the few lucky survivors. Of course, there is no objection to a difficult Latin participle test, provided it were used solely to test a knowledge of Latin participles. Our quarrel is about the use of Latin participles on thirteen-year old children as the sole password for any further education at all.

If the aim of the public high school is to turn out the largest percentage of perfect products, then every indolent, weak, ill-informed, or slow-witted youngster lowers the average and should be got rid of. Such should go into the junk heap as imperfect parts of machinery. Everyone sympathizes with such an aim in a medical school. There the greater the elimination of the unfit, the better will the community be served. The object of the college of medicine is not to assist some young person to get a better footing in life, but rather to discover and train the greatest medical efficiency. Dental schools, law schools, engineering schools have small excuse for keeping half-equipped students; and particularly is it incumbent upon training schools for teachers to hold a high and inflexible standard. We do not need to have Plato's authority for our belief that it is the business of pilots to pilot and of cobblers to cobble. Let us have no foolish tolerance in selecting those who serve us in occupations that directly affect the public weal. No license should ever be granted to blind engine-drivers, to deaf bridge-tenders, to unskilled physicians, to unsympathetic teachers, to dishonest bankers, or to corrupt politicians.

But the object of the public high school is not primarily to turn out an example of skill; its fundamental achievement is to bring our young people a step or two nearer efficient manhood and womanhood, to insure for the next generation a healthier, better-thinking citizenship, to give youth a better training for his later daily work, in short, to make intelligent beings a little more intelligent. This marks the great difference between the school and the mill, altho both institutions may operate looms.

Some high schools are managed like a track team instead of a gymnasium class. A good track team consists of record-breakers, and only the possible point-winners are taken care of; a good gymnasium class consists of all sorts and conditions of physical aptitude and inaptitude, and the weak are prescribed for with even more care than the strong. The chap who cannot jump six feet or run a hundred yards in eleven seconds or hurl a shot so many meters is useless to a track team. Who would eliminate these fellows from the gymnasium hour, or the period of organized play? The track-team high schools have nothing but dismissal for those who do not qualify according to the arbitrary standard.

Every mother has a standard of health for the family, toward which she is daily and nightly striving; but she doesn't asphyxiate all members that do not measure up. Otherwise, it would go hard with the babies in colic time. Indeed, it is the weaklings that receive the tenderest mother-care. Annihilation, we all remember, was Plato's scheme for the underweight babies of his Ideal Commonwealth, the highest standard of efficiency on record. Some of those present may thank fortune that ours is no Ideal Commonwealth. If we had any misconceptions along that line, the recent party conventions have shattered them. As things are, in this imperfect American commonwealth of ours, we must get along somehow or other with the sort of family that has been sent to us.

The new conception of public education is the bettering of all the children of all the people. Dropping from the rolls a large part of the difficult cases increases our ease, but, nowadays, it has begun to prick our consciences. The uneducated "riff-raff er creashun" go on living "in our midst" whether we as teachers are longer bothered by them or not. To cast them out because they do not come up to a Latin-Greek standard, or an algebra standard, or a modern-language standard, or a college-entrance standard, when all the while the children should have been measured by a manual-training or a vocational standard, makes us indictable as bad judges of educational values, and particularly as bad judges of youth. We must take to heart Uncle Remus' plantation proverb that "Yo' can't handle no one-eyed mule on de bline side." So, obviously, our standard must rise or fall with the capabilities of our children: to this group it will be relatively high, to that group relatively low. If your high school becomes suddenly seven-eighths foreign born, as sometimes happens in the seaboard cities, your English teaching dare not remain aloof, but must come right down to the problem before it. If formerly you trained the sons and daughters of the professions but now thru a change in the character of the neighborhood you draw from the toilers, your purely academic standard must show some understandable civic reason for remaining unchanged; and the community should not accept wholesale dismissals of pupils on the ground that they are not prepared to go forward. Our business is to do something with the sort of pupils we get. A discouraged Pennsylvania high-school teacher complained to the superintendent, Henry Houck, "I can do nothing with this class. What do you do when your pupils come to you unprepared?"

"What do I do!" exclaimed Henry Houck, "What do I do! I *teach* 'em!"

As high-school teachers there is no particular virtue in holding a high standard if it results in cutting off all educational opportunity for the pupils that most need helpful guidance; nor is it wise for us to keep up a traditional curriculum if it has ceased to meet modern needs. We are diagnosticians of youth, and the curriculum and the standard are but changeable

means to an ever-various end. We must, to be sure, discover that the Childe Roland who to our dark tower comes has not succeeded in algebra and plane geometry, and make due report of the same; but our eyes must be open also to discover and make use of his native skill in chemistry, in athletics, in languages, in debate, in school journalism, in the management and control of his fellows, in money-making avocations, or in the manipulation of wood and metal.

And more than this. We must be able to put blood into pale faces, to correct flat chests, to straighten crooked backs, to clear out the clogged throat and nose, to add lenses to the eyes as well as to calculate the number of imperfect subjunctives in the first three books of the *Commentaries*. And no matter how squad-like these multitudes march into our rooms, we must keep in mind that each child belongs to some mother or father who cares for it. We must remember, for we get hardened somehow, that it is a tremendously important thing to have a child in the high school getting his life-career settled for him, and that to the little household the curt report of failure, without a word of suggestive help, has a damning finality too often carelessly unregarded by teachers. We should not feel satisfied in discovering only how far a pupil has fallen below the standard. That is to play the part of Alice's red-faced queen shouting, "Off with his head! Off with his head!" "Off with his head" is a thoroly unsocial attitude.

Every step in advance toward greater social and economic efficiency has seen a dropping of the standards. The achievement of free public education itself was a tremendous lowering of the standard; so was the 1776 declaration of equality of men before the law; so was the perpetration in American government of religious toleration; so were the slow grants of suffrage: to the upper middle classes of England (1832), to American Negroes fresh from slavery (1865), to English workmen (1867), to British farm laborers (1884), to American women (any minute); so was the inclusion of the backward child in the scheme of education and the introduction of the workbench for the academic incorrigibles. The growth of the belief in the brotherhood of man as against the ideal of a chosen people is a vast lowering of the standard. Even Calvinism has succumbed to the inevitable, broader movement; it has almost reversed its former stand of a democratic "fall" and an aristocratic "redemption." More folks are redeemable nowadays, even if the standard for the whole is not so high.

What steps in advance we have made! Time was when we whipped the weak-witted because they did not come up to our standard, and filled their lives with daily and nightly horror of failure. Not so long ago we used to harry with demerit marks those who had no mind for book-knowledge (that is, eye-knowledge and ear-knowledge) but had untold capacity for devilment and hand-knowledge. In the name of a high standard we used to keep feeble-minded chaps in the first grade at most unfitting tasks until they could no longer stand the mocking of their fellows. We used to force

all pupils, sick or well, to the same number of hours a week, and do so yet in many places. We used to compel all school children to sit for hours in silent rigidity, hands locked behind backs, with long detentions for those who squirmed or "spoke," until school became hateful and the freedom of the factory a welcome release. We used to make no attempt to teach the deaf to hear, or the blind to understand, or the stammerer to speak, or the mentally twisted to think coherently, for no school with a decent respect for its standard would have anything to do with them.

The term "high standard" has two distinct uses which we must never confuse. Holding a high standard means maintaining a high ideal. Let us by all means keep the ideal for each young person at its highest, and strive to bring him nearer to it than he would ever have been had he not fortunately met us. The ideal for each person is the best that he is capable of doing. But let us not be forever shouting, "Off with his head," when he does not do what we have arbitrarily decided he should be capable of doing. With all our twentieth-century study of young folks we should have done with trying to feed fine rich clover to impatient hunting dogs.

A high standard means a high ideal, but it means also the "dead-line." A prisoner that steps over the dead-line is instantly shot. A child that fails in spherical geometry and advanced French can have no further education from the state. The live side of that dead-line has been heretofore mighty slim for children between the ages of twelve and seventeen. Let us widen it. American boys and girls should not have to wait until they are "sent up" to a reform school before they can get the sort of education that will bring the best out of them. Too many able youngsters are being shot down for stepping over the dead-line, and every educational life thus snuffed out is eventually a telling loss to the nation. Every individual is important in a democracy, and no standard of education paid for out of the common funds dares say that any group of individuals shall have no help or guidance.

It is our business, particularly in the high school, to help young people to a better adjustment to the life they must eventually live—all the young people that come to us. It is our business, which we cannot avoid, to fit the intellectual and social needs of all the varieties of boy and girl that find their way to our charge, and of thousands of others whom we do not now attract at all. That is our high-school program for the future, and it is not impossible. Says wise Uncle Remus: "Folks dunner w'at *bin* yit, let lone w'at *gwineter be!*"

TOPIC: A NATIONAL UNIVERSITY

A. THE NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND THE NATIONAL UNIVERSITY

EDMUND J. JAMES, PRESIDENT OF THE UNIVERSITY OF ILLINOIS, CHAMPAIGN, ILL.

I have been asked to make an address upon the relation of the National Association of State University Presidents to the movement for the establishment of a national university.

I desire to say in the first place that, apart from the facts which I shall give concerning the action of the association, I shall be presenting my own ideas. I believe they represent fairly well those of my colleagues in the association, and yet, as they have not been presented to them for their criticism or indorsement, I wish it to be distinctly understood that I am speaking for nobody but myself in the argument which I shall present on this subject.

After the fullest and most careful discussion of all phases of the subject the National Association of State University Presidents has repeatedly indorsed the project for the establishment of a national university. This means a university established by the federal government of the United States, deriving its support primarily from the federal treasury, subject to the ordinary control which a free government exercises over its organizations and their work.

I desire to lay down two or three propositions which seem to me fundamental in securing a proper position from which to judge this whole question. My first proposition is that in a free state education is fundamentally a national function. I do not mean by this that it is necessary for the federal government of such a free state to regulate, control, or support education; tho it may be desirable that it should do so. If the locality or the state or the two together, in a country like ours, will provide adequately for this national function, it may be properly enough left to them; but if they either do not or will not provide for it, then the federal government itself should undertake to see that provision is made. I mean, therefore, that education is a national function in the sense that it is of fundamental importance to the nation as a whole; that it should be properly performed, and if there is no other way to secure its proper performance except thru the co-operation of the federal government, then we should have this co-operation.

I maintain that in a state like ours education is a national function; because to the permanent endurance of a republic, popular education is an absolute necessity, and if it cannot be obtained by one form of governmental organization, then it must be obtained by another, or the nation will suffer the consequences. No free government can long exist which

is based upon an illiterate people—nay, I believe we may properly paraphrase Lincoln's great expression on another subject, that this government cannot remain permanently free if it is based upon a population half literate and half illiterate. All the people must become educated to the necessary extent to secure the basis for democratic government, or all will become uneducated, i.e., will fail to secure that degree of education necessary for the preservation of a free state. Now that is a national function, to my mind, in its nature, the adequate performance of which is essential to the existence of a nation. From this point of view, education after the national defense is the most distinctly national function of all the functions which our society has to perform.

But education is national in its nature from another point of view and should be recognized as such in the organization of our government. The advantages given by elementary and secondary and higher schools are not limited to the communities which support them. A little red schoolhouse upon a lonely hillside of a New England state may train the man who will head a great movement for reform and progress in a distant state beyond the Rocky Mountains. The people of the latter state profit by the education which that man obtained at the expense of that New England district, and they should, by all standards of fairness, contribute their part toward the support of the school which produced him. In fact I think it is not too much to say that, taken broadly, the history of this country during the last two generations will demonstrate that in many cases the chief advantages of the school system of a community have redounded to the benefit of other communities in which the particular boys and girls educated in these community schools have subsequently spent their lives and done their work as members of society. Now if all sections of the country profit by the existence of educational advantages in any one community, so the country and the nation as a whole should be expected to do its part in developing and supporting these local facilities for education.

There is another reason why education is in its nature a national and not a local or state function, and that is that the disadvantages of the lack of facilities and the lack of schools are not limited to the communities which suffer such lack of school facilities to exist. You hear a man say sometimes that it is up to the community to keep its school, and if it doesn't wish to keep one, let it suffer the consequences. But the same thing is true here as in the case just mentioned—the evil results of inadequate school facilities do not accrue alone to the communities which neglect such matters, but are liable to be of the most serious consequence to other and distant communities; because, under our scheme of life, the ebb and flow of our population is so continuous and so extensive that the boys and girls who have missed the opportunity for the highest development, owing to the lack of these local facilities, become members of other communities

and go into them and into their work weighted down with all the ignorance and apathy and indifference to higher things which is characteristic of an ignorant population as a whole. So that, alike by the distribution of its advantages and the distribution of its disadvantages, popular education is in its nature a national and not merely a state and local issue, a national function and not merely a state and local function, and consequently, unless the locality and the state can and will perform this function satisfactorily, the nation must come in as a unit and thru its organized representative, the federal government, contribute its share in this way to the support of this common institution.

We must not lose sight of the fact that it is after all the American people as a whole that pays the bills. It is not the nation distinct from the state or the state distinct from the locality; but it is the locality and the state taken in their totality which make up the nation; and it is therefore a mere question of expediency thru what organ and to what extent the people will exercise their power for the purpose of promoting the public welfare.

Now there is another important reason why the people of the United States should aid the cause of education thru their federal government as well as thru their state and local government, and that is that the people as a whole can do certain things thru the co-operation of their federal government which they cannot do thru their state government or thru their local government alone. The expense of an adequate educational system is enormous, and grows continually with the rising standard of the people as to what state education is. An adequate revenue system will draw upon national sources of revenue thru the federal government, upon state sources of revenue thru the state, upon local sources of revenue thru local government. Some sources of wealth may be more easily and efficiently tapped thru the federal government than thru the state or local government, and vice versa.

In our scheme of federal government in this country, we handed over to the central authority a revenue power—I will not say more than adequate for the federal purposes which we incorporated in our constitution, but I will say more adequate to accomplish the national ends contemplated in the law than were given to either the state or the locality. The federal government can raise funds in many respects more easily than either the state or the locality. And a sound financial system demands that that element in our system shall raise the revenue which it can raise most easily and then that a reasonable distribution of the revenue so raised among the various federal functions and among the state and local functions shall be made.

I think our history has demonstrated clearly enough already that education can never be properly cared for in this country unless we draw upon national sources of revenue as a means of assisting in its support.

Owing to history which I need not recount, the southern states, for example, find themselves in the position of having two independent and complete systems of education, for the white and colored races, respectively. It is quite unreasonable to hope that in our day and generation the southern communities will be wealthy enough, or, what amounts to the same thing for our purpose, will think they are wealthy enough, to care adequately for these great interests, and if the people will not utilize their other sources of revenue and their other organs of government to assist in providing a part of the means for the solution of this problem, we shall still continue to suffer as we have suffered for generations by this situation.

My next proposition is that this country cannot solve its educational problems in the large until it recognizes that education is the business of the nation and that pecuniary assistance for its support in a large way shall come thru the organs of the nation as a unit.

We cannot get the money in any other way. We refer, of course, by preference in our educational discussions to the unhappy educational conditions of certain portions of the South. But the conditions are just as really and just as truly inadequate over whole sections of the northern states as they are in the South. We need not go out of the state of Illinois itself to find schools which do not deserve that name. We need not go outside of Illinois to find local communities which, after taxing themselves to the limit which the law allows, still have not sufficient money to maintain during the months in which a child ought to be in school the kind of school which it is worth the child's while to attend.

There is another important matter which we ought not to lose sight of. Great national issues are pushed forward only when it is possible to secure national attention for them; only when they have become national in a formal as well as an informal way; only when the nation is discussing them as great national issues. If we could get national attention concentrated upon our educational problems year after year as one of the fundamental issues going to the very life of the nation itself, we should make vastly greater progress than we do. And this attention we shall get when we recognize the essentially national character of education by making educational policy a part of national policy. When the federal Congress discusses educational questions as fully, as completely as it discusses questions of defense and the tariff and internal improvements, we shall be in a way of securing for educational issues that attention which is necessary to their continuous and rapid solution.

Intimately connected with this fact, namely, the necessity of securing national attention for the consideration of national problems, if we wish to hasten their solution, is the further one that we could advance with far greater certainty and with far greater speed, our national standards, i.e., the standards of the people taken as a whole and in their local organizations, if we can get before the nation as a whole a proper standard of what education means and what education ought to mean.

The nation then, and not merely the local school district or community or state, must become an educational unit in all grades of education.

It has already become so to a certain extent. It is becoming so more and more with every passing day, unequally, it is true—in spots only—here and there, but steadily and persistently. The federal government has granted lands for the support of elementary education in nearly all the states of the Union within whose territory were to be found large stretches of government-owned land. In fact the federal grants were the foundations of the school funds in the vast majority of the states of the Union. And out of these grants has proceeded the organization of a system or scheme of education in nearly three-fourths of the states of the Union. But the federal government has not been content with this. It began some fifty years ago the policy of developing within each state in the Union a higher institution of learning supported in large part, first, by federal grants of land; second, by the grants of money realized from the sale of lands; and finally, by grants of money raised by the general revenue system of the government. Today we have sixty-seven such institutions which owe a part or the whole of their income to the action of the federal government. The aggregate value of the permanent funds and equipment of these land-grant colleges themselves exceeds today $125,000,000. The total income of these institutions in 1910 was nearly $23,000,000. It would take an endowment fund of over $450,000,000 to produce this income.

We take pride here in Illinois in the fact that it was an Illinois farmer and professor who first formulated this plan, and that the legislature of Illinois was the first American legislature to stand strongly behind this policy of federal grants to higher education within the states. It has become the greatest scheme of an educational endowment which the world has ever seen. The federal government itself contributes only a small part of the total funds necessary for the support of these institutions, but it was the giving of that small part which made the rest of it possible, which stimulated local and state interest, which by fixing national standards stimulated the nation to rise to these standards. I have very little doubt myself that, if it had not been for the action of the federal government in making these appropriations for the development of agriculture and the mechanic arts within the states, we should be a whole generation behind what we are in the development of our educational system.

Incidentally I may say that the House of Representatives of the Illinois legislature has again led the way in urging upon the federal government the necessity of large additional grants for educational purposes by sending to Congress a unanimous petition as follows:

WHEREAS, The legislature of Illinois by the joint resolution of February 8, 1853, was the first among the American legislatures to petition the Congress of the United States to make a grant of public land for each state in the Union for the liberal endowment of a system of industrial universities, one in each state, to promote the more liberal and practical education of our industrial classes and their teachers; and,

WHEREAS, The Congress not only made a liberal grant of land in the year 1862 for this purpose but has also followed up this policy once begun by still more liberal appropriations for the support of higher education in agriculture and the mechanic arts, resulting in the great chain of colleges for agriculture and the mechanic arts to be found in every state and territory in the Union; and,

WHEREAS, The time has now come for the adoption of a similar policy in the field of elementary and secondary education; therefore, be it

Resolved, By the House of Representatives of the state of Illinois, the Senate concurring herein, That the Congress of the United States be respectfully petitioned to appropriate annually to each state and territory in the Union a sum equal to one dollar per head of the population of said state or territory as ascertained by the last census, for the purpose of establishing, maintaining, and extending in the elementary and secondary schools of said states and territories, while not excluding other elementary and secondary subjects, such practical, industrial, and vocational training, including agriculture, the mechanic arts, domestic science, manual training, commercial subjects, and such instruction in other similar subjects of practical nature as the interests of the community may seem to demand; and

Resolved further, That our Senators in Congress be instructed and our Representatives be requested to use their best exertions to procure the passage of a law of Congress donating said sum to each state and territory in the Union for said purpose; and

Resolved further, That the Governor of this state is hereby requested to forward a copy of the foregoing resolutions to our Senators and Representatives in Congress and to the executives and legislatures of each of the other states and territories inviting them to co-operate with us in this meritorious enterprise.

I wish to emphasize again very strongly that national aid to education, whether lower or higher, does not necessarily mean excessive federal centralization and control. The extent to which the federal government shall have control of the funds which it devotes to education is a matter of expediency to be settled from time to time and from generation to generaton, as national and local needs and possibilities may dictate.

I should like to call attention to one other fact, and that is that the federal government when it wished to develop, by the expenditure of a comparatively small sum of money, a system of educational institutions which should have a profound effect upon the development of elementary and secondary education, chose to establish colleges, not high schools; colleges, not grade schools; colleges, not kindergartens. In other words, it recognized that in the development of an educational system in a country progress goes often from the so-called higher to the lower. You cannot develop a good high-school system unless you have a good college system which can supply the necessary teachers, the necessary guidance, the necessary stimulation, the necessary leadership. You cannot have good grade schools unless you have good high schools which furnish, taken as a whole, the training of the teachers employed in these elementary schools. The converse is of course equally true, that you cannot develop your college beyond a certain low level of efficiency unless the high schools can be brought up to a high level. Nor can you raise the level of your high schools to what it ought to be unless the grade work is done properly.

I desire again to call attention to the importance to educational advance of securing a national formulation, a national organization of the educational idea and educational ideal.

There is a subtle moral and psychological reaction upon the people as a whole arising from the formulation and incorporation of a national ideal in a practical national policy which spells progress and success for movements which are able to find such national expression.

As suggested above, when education is as regularly the subject of national debate and national conflict as the tariff, banking, and currency, internal improvements, we shall take another long step forward in our educational development.

What I have thus far said applies to all grades of education alike, and it is upon this foundation that in my advocacy of a national university I take my stand. If the views thus far advanced command your assent, I believe I shall have your consent to the further proposition I advance, namely, that one of the essential elements of our American system of education is the kind of a university which the federal government can build and which shall stand, so to speak, at the apex of our educational pyramid, or, if you choose to reverse the simile (it is all one to me), which shall be the foundation stone upon which the pyramid of national education shall be erected; for all history shows that from the universities, from the highest schools, have gone forth steadily those influences which have molded and shaped and fashioned the popular education in all times and in all countries.

I mean by a national university an institution sufficiently like the ordinary institutions with which you are all acquainted to be thoroly familiar to you. A teaching and training, as well as an investigative institution, manned with the best men in all departments in which the human intellect has exercised itself, drawn from the entire world, equipped with all that money can provide, for the purpose of stimulating and increasing our interest in the world of the spirit and the world of sense about us.

Now, one of the fundamental purposes of a university system is to beget, diffuse, and establish, in the mind—nay, I will say also in the heart of the people—the scientific spirit and the scientific method. If this can be accomplished, the face of the world will be changed. Now this can be done in certain respects more easily and more thoroly and more rapidly by means of a system of state and national universities than by any other means.

In what I am about to say I am not animated by any spirit of opposition to the historic private institutions of this country. He would be an ungrateful American indeed who would cast any slur upon Harvard and Yale and Princeton and the scores of more recently founded private universities, like Hopkins, Chicago, Leland Stanford, and Northwestern,

which are such an honor to our country and our civilization. I should certainly consider myself an ingrate if I should say anything derogatory of Harvard or Pennsylvania or Chicago or Northwestern, where as student or professor or president I had an opportunity to prepare myself for public service, and to have had some small part in the glorious work of these institutions. All honor to them, and increasing power and glory and prosperity! But, friends, however great they may become—and may their shadow never grow less—they can never accomplish the purposes we have here in mind, namely, to incorporate in a visible form the national ideal of university education.

I have long been a warm admirer of President Eliot, in many respects the greatest figure in American education. He was kind to me personally when I was a Freshman at Harvard. He was for more than a generation my guide, philosopher, and friend in the field of university education and administration. I think it is not too much to say that he revolutionized American higher education and revolutionized it to its great betterment.

But I know no more striking illustration of the fundamental weakness that doth beset us all than President Eliot's notion that he could make of Harvard a national university in the sense that we have been using the term here—that he could make a private institution, dependent for its resources upon the liberality and self-sacrifice of alumni, however generous they may be, or upon the whims of rich men, however numerous they may be, situated upon the edge of the country, even tho in such a glorious city as Boston—that he could make an institution so located, and so fathered and mothered, to be that embodiment of our national ideal of science and education and art which we are looking for. Other men have or have had the same notion for their institutions. Idle and vain hope. Neither Harvard nor Yale nor Columbia nor Princeton, nor all of them taken together, great as is their function, great as is their service, can hope to do this particular service for this country. Nor Mr. Rockefeller nor Mr. Carnegie nor both of them together, tho multiplied by five and animated even still more fully than at present by patriotic unselfishness and far-sighted motives, can do this thing for the nation, which after all only the nation can do for itself. The state universities of Michigan and Wisconsin and Minnesota and Illinois and the forty others—no one of them alone nor all of them together, great as they may become—and we are all headed for great things—can hope to fill this place, incorporating in themselves in such a way as to satisfy the national longing that deep-felt, that unexpressed ideal of university education.

The reason is simple. No partial expression will satisfy this longing for wholeness. When that which is perfect shall have come, that which is imperfect will unite with it and help constitute its perfection—private and state institution, with the national university, making one complete system—or it will dry up and disappear. When that which is complete shall have appeared, that which is incomplete must become a part of it

or be sloughed off or cast into the scrap heap. No national university can exist except as the creation and organ of the national will, shaped and directed by it. Supported and sustained by this national will, it will be the expression of you and me and all of us, we a part of it, and it of us.

Such an institution would not injure, but benefit, every private and every state university, by its superior support, by its superior prestige, by its greater wealth. It would strike the popular imagination of this country in such a way as to give to the university idea itself an enormous impetus, the reflex effect of which would show itself in the increasing prosperity and development of every private and state institution.

The foundation of Leland Stanford did not injure the University of California, but helped it immensely. The foundation of the University of Chicago did not injure Illinois or Northwestern or Michigan or Wisconsin, but by the bold and striking way in which it raised high aloft the standard of science it gave an impetus to the university idea which made the work of every one of these institutions more adequate and more easy.

The same thing would be true in a larger degree of a national university, organized along proper lines, and put under proper influence.

Such a national university as I have suggested, located at the site of the federal government, supported by appropriations from the federal treasury, controlled and regulated by federal law, would easily become, as it ought, the crowning institution of our university system, private and state alike. It could supplement the shortcomings of our other institutions as well as emphasize their excellences. It could undertake many enterprises of national scope, which no existing single institution, public or private, can afford to undertake. It could offer to our best-qualified young men and young women opportunities which only a nation like ours can afford to offer.

Such an institution, located in the national capital, would exercise a vigorous and salutary influence on the course of federal legislation itself. Its pointed spires and gilded domes would of themselves be powerful tho mute monitors calling attention to the claims of science to be the guide of legislation.

Such an institution located in the center of political power of the greatest nation on earth would attract in large numbers the bright and promising youth of other countries, who as students here would imbibe those fundamental American ideas which we fondly believe are destined to work out the salvation of the world when they shall have done their perfect work, while these youth would gain added respect for our society and our ideals, which carried back home and incorporated in their own policies would contribute powerfully to that mutual understanding which is the surest basis for international peace.

Such an institution, located in Washington, could utilize for purposes of instruction and investigation the wonderful resources heaped up by the government of the United States in its scientific developments. The

National Library, the museums and collections of all sorts, lie largely fallow at present, waiting for the people of the United States to make their utilization possible in the various schools and colleges of a national university.

Such an institution, located at such a strategic point, will wield a subtle, ever-deepening and ever-widening influence over the whole American people in the direction of increasing their interest in and belief in science as an important element in private and national life. It will be their university, and they will come to take an increasing pride in, and appreciation for, the work it is doing; and thus will by this reflex effect be trained gradually to entertain an ever-deeper respect for the standards and ideals of higher education itself.

Friends, such an institution is coming, as surely and irresistibly as the tides of ocean. Will you help it or will you oppose it, or, worse than either, will you do nothing?

This National Education Association could secure the establishment of this institution in a short time if it would only go after it in earnest. Ignorance and apathy and prejudice have thus far been most potent in preventing the realization of this dream of Washington. Private institutions, religious and secular, have opposed, thus far successfully, the movement. Private institutions, men of wealth, men of no wealth, men of ideas, men of no ideas, have set themselves against this project. It is up to you and the like of you to help bring this about in our day and generation.

This great power can be set to work immediately in the interests of science and art and education, supplementing, reinforcing our defective and weak system of education. Every day its coming is delayed represents so much pure loss to the causes in which you are interested, to the welfare of this nation, and to civilization in general, of all that it might contribute if it were now at work.

This institution, this national university, would be one of the most important elements in making this nation of ours in reality what it is in our dreams and hopes and fond anticipations, the leader of the world in art, in science and education, and in civilization.

B. A NATIONAL UNIVERSITY A NATIONAL ASSET; AN INSTRUMENTALITY FOR ADVANCED RESEARCH

CHARLES RICHARD VAN HISE, PRESIDENT OF THE UNIVERSITY OF WISCONSIN, MADISON, WIS.

GUIDING PRINCIPLE

At the outset the guiding principle may be laid down that at Washington there is no necessity for a university of a type which exists elsewhere, no need of an additional university like the great endowed and state institutions of the country. One who advocates a national university at Wash-

ington with the idea that it shall be a larger Harvard, Yale, Columbia, Cornell, or Chicago, a larger Michigan, Illinois, Wisconsin, Minnesota, or California, will fail in his advocacy, because he cannot give to Congress a sufficient reason for the expenditure of public funds for another university of a kind of which there is a sufficient number. Not only would such an advocate be met by the above fact, but by the fact that in Germany, where universities are most highly developed, they are state, not national, institutions.

If, then, it is not desirable to establish a bigger Harvard at Washington, what is the aim of those who are advocating a national university? It is to make available for the advancement of knowledge the unparalleled facilities of Washington to graduate students.

At Washington are the Congressional Library, the National Museum, the Smithsonian Institution, the Geological Survey, the Bureau of Mines, the Naval Observatory, the Public Health and Marine Hospital Service, the Army and Medical Museum, the Office of Public Buildings and Grounds, the Board of Ordnance and Fortifications, the Bureau of Education, the Weather Bureau, the Bureau of Animal Husbandry, the Bureau of Plant Industry, the Bureau of Chemistry, the Bureau of Soils, the Bureau of Entomology, the Bureau of Biological Survey, the Bureau of Corporations, the Bureau of Manufactures, the Bureau of Labor, the Bureau of the Census, the Coast and Geodetic Survey, the Bureau of Standards, the Bureau of Statistics, the Bureau of Fisheries, the Bureau of Navigation, the Bureau of Immigration and Naturalization. In these and other bureaus and divisions are available a vastly wider variety of material for scientific research and a greater collection of books and manuscripts than elsewhere exist. To enumerate in detail the facilities and materials available for work in each of the domains of knowledge would require more space than is allowed for this entire paper. Also, such a statement is rendered unnecessary because of the admirable report regarding the matter by President Arthur T. Hadley;[1] but to serve as illustrations some of the facilities for a few of the lines of knowledge are mentioned.

For the modern humanities, political science, political economy, and sociology, there is a wealth of material in nearly every department. The Department of Labor, the Interstate Commerce Commission, the Census Bureau, the Bureau of Statistics, the Bureau of Pensions, the Bureau of Immigration and Naturalization, and the Bureau of Corporations, are all applied divisions of political economy and political science. Nowhere else in the country is there such a mass of first-hand information regarding many of the most pressing problems for these subjects. Also the various government activities of Washington, comprising Congress, the executive offices, the judiciary, and their numerous divisions and branches, give illustration of practical political science on the largest scale. At Washington not only

[1] Arthur Twining Hadley, "Facilities for Study and Research in the Offices of the United States Government at Washington," *Bulletin 398, United States Bureau of Education.*

may the student of political science have the material of the subject, but also he may appreciate with what labor and difficulty results are achieved in practice.

For history, and especially the history of America, at the Congressional Library is a vast amount of material, indeed practically everything which is in printed form; not only so, but in the library is a vast collection of documents. In the State Department, the War and Navy Departments, etc., are the archives of the government since its foundation, all but a small part of which are available for the student of history.

For anthropology, the National Museum and the Bureau of Ethnology have collections and materials of the first order of importance; indeed no other collection of the country can approach them, with the exception of the American Museum of Natural History in New York.

For physics, astronomy, and mathematics, there is a great mass of material in the National Observatory, in the War and Navy Departments, in the Coast Survey, the Bureau of Standards, the Weather Bureau, the Patent Office, and other departments.

In chemistry, there are laboratories in almost every department and bureau, which deal with materials both organic and inorganic.

For geology and its related subjects, geography, paleontology, and physiography, at the Geological Survey and the National Museum is found one of the world's largest collections.

For biology, there are available the National Herbarium, the Biological Survey, the Commission of Fish and Fisheries, the botanical division of the Department of Agriculture, the National Museum, and other departments.

Passing now to applied science: Almost every phase of advanced engineering work is illustrated by some division of the government. The material which would be especially available is that found in the War and Navy Departments, the Bureau of Mines, the Coast and Geodetic Survey, the Division of Architecture, the Hydrographic Office, and the Land Office.

For agriculture, practically the whole department except administration is devoted either to the advancement of the science or to the dissemination of practical information. This great department had an appropriation for 1911 of more than $20,000,000, the larger part of which went for scientific and extension work. An enumeration of the divisions of the Department of Agriculture shows how wide is the scope of this work: the Bureaus of Animal Husbandry, Plant Industry, Weather, Forest Service, Chemistry, Soils, Entomology, and Biology.

While the Department of Agriculture has by far the largest appropriation for scientific work, the appropriations for scientific purposes in other divisions vary for each from more than $100,000 to more than $1,000,000.

While it would not be easy to give an accurate statement regarding the amount of money which is available in the various departments at Washington for investigation and for the tools of investigation—apparatus and

books—it is safe to say that the total amounts to many millions of dollars per annum; or put in another way, more than ten times as much as any single university or institution in the country for this purpose.

The vast collections of books in the Congressional Library and the large special libraries in the various departments, especially those of the Geological Survey, the Surgeon-General's Office, and the State Department, cover a greater number of fields of human knowledge with an approach to completeness than exists elsewhere in this country. These libraries are admirably administered. Expert assistants are available, so that the material on any given subject is readily secured. Not only so, but special privileges are granted in the reading-rooms and in the stacks to qualified students. The facilities in these respects are incomparably beyond those of any library in other countries. It is safe to say that the collections of books in the government libraries at Washington could have an efficiency ten times as great as they now have at a small additional cost.

Manning the scientific bureaus and divisions is a scientific staff many times larger than in the largest university in the country. It is this amazing wealth of men and material at Washington that should be available for the production of scholars and investigators along many lines.

THE DEMAND FOR IMMEDIATE RESULTS

At the present time, unfortunately, the demands for immediate results by the government compel the great staff to give by far the larger part of their energy to special problems with reference to practical ends. The rich materials from the larger point of view of the advancement of science are in large measure neglected.

LARGE SCIENTIFIC RESULTS OBTAINABLE

If in each of the bureaus and departments mentioned there were advanced students working on the materials there existing, not with reference to the solving of particular problems which engage almost exclusively the attention of the existing staff, but with reference to the advancement of science, there can be no doubt that results of untold value would be obtained. It is believed that the utilization of this material in any bureau or department by a limited number of students need not interfere with the efficiency of the department in reaching the immediate results demanded by the government. Not only so, but it is believed that a group of advanced students, which in any department would not be very numerous, but which in Washington as a whole would aggregate a large number, could be made the means of greatly improving the work of the scientific staff of the various bureaus.

In making the statement that the bureaus at Washington yield relatively little in the way of broad scientific results, it is realized that there have been and still are some exceptions. When the United States Geological Survey

was originated there was drawn to Washington the most brilliant group of geologists in the country. This survey for a number of years was the center of the world for the advancement of the science of geology; but in recent years, while the organization is vastly larger, having appropriations of millions where it had in the early days appropriations of hundreds of thousands, it is almost exclusively a department of practical geology. It is not contributing in any large way to the advancement of science.

That contributions of the Naval Observatory to science have not been large has been known for many years. In 1898 a report was made by a committee of astronomers showing that the practical duties of the Naval Observatory could be easily performed by a very small establishment. In this report it was pointed out that a national observatory is justified because astronomical observations and research might there be made which cannot be accomplished at private and university observatories. The great new observatory building at Washington is splendidly equipped to carry on researches of the highest character; yet at the present time the advancement of the science of astronomy in this country is thru Harvard, Yerkes, Lick, Mt. Wilson, and other university and private observatories. The astronomers all agree regarding the first step necessary to remedy this situation, as does also the president of the United States and the committee on naval affairs. There should be appointed a civilian astronomer of the highest rank as director of the observatory. If this were done and the large facilities were made available to advanced students, this institution might take first place among the observatories of the world.

At the present time the advancement of science in its broader aspects is contributed to by only a few of the scientific bureaus at Washington, illustrated by the Coast and Geodetic Survey and the Bureau of Standards. On the other hand, in the universities of the country men are engaged in teaching and each year necessarily considering their subjects in the large, and immediate results are not demanded. These universities and the few independent research institutions, illustrated by the Carnegie Institution of Washington and the Rockefeller Institute of New York, are the chief centers for the broader contributions to science and learning.

THE RELATIONS OF TEACHING AND INVESTIGATION

It is my conviction, based upon many years of observation and experience, both in a university and in a department at Washington, that upon the average a man produces the best scientific results who does some teaching. To give a course to a group of advanced students requires that a man go over the subject broadly. Even if the course be highly specialized, a man must consider his material, not only in its interrelations, but its relations to the other branches of his science. One who is a productive scholar scarcely gives a lecture upon a subject which he is investigating without illumina-

tion reaching him upon some point. There is nothing more productive of ideas than the presence and inquiries of young and earnest minds. A man who at Washington sits at his desk six days in the week, delving in his subject, often becomes buried in his material. Too frequently he never sees it from the outside. His material masters him instead of his mastering his material. The successful teacher must get outside of his subject and consider its broader aspects.

I believe that the productivity of the scientific staff at Washington, even from the point of view of immediate results, would be improved during a given period, if each year the men of reputation were each obliged to give one set of lectures for at least a half-year, either upon the subject under investigation, or some part of a science related to the investigation. The opening of the scientific bureaus at Washington to such students as are sufficiently advanced to take advantage of the material, and affording opportunity to members of the scientific staff each to give a course of lectures, would greatly improve the efficiency of the bureaus.

However, in order that the lectures may be successful, it is necessary that they be a part of the official duties of the scientific staff, not extra work for additional compensation. At the present time, because of the meager salaries, a number of men belonging in the departments give lectures in George Washington University or other institutions, thereby gaining additional compensation. This is an extremely unsatisfactory condition of affairs, in that it requires teaching to be done in addition to the day's work at the bureau. In order that lectures shall be efficient and the man who gives them gain the most inspiration and the largest broadening effect from them, they should be a part of his regular work. By the proposed combination under which a relatively small amount of instructional work would be given by any member of the scientific staff, I confidently believe that the work of the various scientific departments and bureaus, considering only the point of view of efficiency, would be greatly improved.

Thus in creating the conditions essential for the special national university which should exist at Washington, we should thereby increase the efficiency of the departments.

An incidental important gain which could come from the adoption of the plan proposed would be the training of men to fill the scientific staffs at Washington. Under present conditions, we know the staff contains many mediocre men. While this is due partly to lack of properly trained men of ability, it is realized that it is due also to niggardly pay, combined with the high cost of living at Washington. Too frequently a man who develops unusual ability in a bureau either goes to a university where he obtains better financial terms and more favorable opportunities for scientific work; or, because he cannot decently support a family upon his salary, he goes into some profession or business in which he can apply the knowledge he has obtained in a department.

THE REQUIRED MACHINERY

We now have the fundamental facts before us. Not to arrange so as to utilize to its highest efficiency the vast wealth of material for scientific research at Washington is nothing short of improvident and reckless waste of great opportunities. It is a wrong to a member of the staff to demand that he grind away at his practical problem year in and year out without giving him a chance for a larger view thru instructional work.

If the above conclusions be accepted, the next question to be considered is the machinery required in order to secure these desirable ends. It may be said at the outset that for the national university here advocated, while some money must be available, no large appropriations are necessary. The institution must have an executive officer. Under him must be a staff, the duty of which shall be to learn all of the scientific possibilities of the various departments and bureaus, to advise students who come to Washington, and to arrange for their work. It should be the further duty of the administrative force to prepare announcements of the courses of instruction which are to be given, with descriptions of the material available for such courses, precisely as is done by each of the universities.

The administrative force of the national university, if desired, might be associated with the Bureau of Education; indeed this would seem to be a very natural association. If this suggestion be accepted, the administrative staff and the Bureau of Education could both be housed in a single building and such co-operation established between the two as would be to their mutual benefit.

For the above work an administration building or a part of a building is necessary. Temporary quarters should be rented, and later, when experience shows achieved results warranting the expenditure, an appropriate permanent building should be constructed. In the administration it would be necessary to provide some lecture-rooms, altho the halls in the National Museum and in various other public buildings should be utilized for the larger lectures. The men who give specialized courses to small groups of students probably would prefer to give them in the building in which they work; for there would be the materials and the special libraries. This would require merely that each bureau or institution, illustrated by the Naval Observatory, the Geological Survey, the Bureau of Animal Husbandry, set aside one room of moderate size for lectures.

One of the obstacles in the way of the highest success of the plan is the insufficient housing of many of the departments; but the obstacle will gradually be removed. This is evidenced by a number of exceptions. At the Congressional Library there is ample space for all the students who may desire to come. In the magnificent new National Museum, where are associated the wonderful collections in geology, mineralogy, biology, anthropology, etc., is the most ample set of workrooms and laboratories anywhere in the country. Scores of students could there readily be accom-

modated without interfering with the effectiveness of the staff. The Naval Observatory has a splendid new building. The Bureau of Standards has adequate quarters. All these new structures have become available within a few years, and others will undoubtedly exist within a comparatively short time.

EXISTING LAW

Already the principles above advocated have been recognized to a certain extent by Congress thru two enactments, the first in 1892 and the second in 1901. Under these acts the scientific collections, museums, and libraries of Washington and their other facilities were made accessible to scientific investigators and to advanced students "under such rules and regulations as the heads of the departments and bureaus mentioned may prescribe."[1] Apparently the act of 1892 also contemplated that the advanced students who do work in the departments would have the assistance of the members of the scientific staff, for the preamble includes the phrase, "promote the work of education by attracting students to avail themselves of the advantages aforesaid *under the direction of competent instructors*."

These laws have been taken advantage of to a small extent. As pointed out by President Hadley, their main service has been to men who are already trained for their work and are competent to carry on investigations independently of direction. These men have simply come to Washington and there used for their ends the material which the departments have afforded. For advanced students who still need the guidance of formal instruction the effect of these laws has been so small as to be almost negligible. Substantially the only exceptions are the one or two departments in which the scientific staff have voluntarily as a part of their duties given instruction either to the younger members of the staff in order better to fit them for their work, or to outside men. The best illustrations of this are furnished by the Bureau of Standards, the Public Health and Marine Hospital Service, and the laboratories of the Bureau of Fisheries at Woods Hole and Beaufort.

EXPLANATION OF MEAGER RESULTS

That no large results have come from the acts mentioned, one of which has been a law for more than ten years, might be regarded as evidence that the position above taken concerning the desirability of making the opportunities at Washington available for scientific work is unsound. However, it is obvious that the failure of these laws to produce marked effect is due to three reasons.

First: There is no information published describing the facilities for research at Washington and the different lines of work which may be there profitably pursued.

[1] Annotated Federal Statutes, Vol. II, pp. 860–61 (Edward Thompson Co.).

Second: There has been available no single bureau to which application can be made for the use of the facilities, no one to guide the work of the advanced students, no one to correlate the different lines of work. It is perfectly futile to suggest that a student go to Washington, enter a bureau, tell some official that he has come to take advantage of the provisions of the laws mentioned. This a man would not do; and if he did so, the chances are that he would gain very little satisfaction by so doing, for he would be lost in the mazes of the bureaucracy. As President Hadley puts it: "The student who comes to Washington today to get his scientific training in the government departments comes under his own impulse and at his own risk."

Third: For effective advanced work it is necessary that regular instruction be given. The existing laws do not provide for such instruction. If the proposal be accepted that members of the scientific staff be permitted as a part of their duties to give a limited amount of instruction, this fundamental necessity for successful advanced work is met. In this connection it is notable that in those instances where instruction has been given by the members of the staff, illustrated by the Bureau of Standards and the Bureau of Fisheries, the facilities for advanced instruction have been taken advantage of. It seems to me that these cases in which important scientific results have followed systematic instruction furnish conclusive evidence that if the principles applied in these bureaus were extended to other bureaus, the facilities and opportunities would be taken advantage of upon a considerable scale, perhaps as great as their facilities permit.

Therefore, if the opportunities for scientific work at Washington were as definitely described as are the courses in the catalog of a university, if there was a central place to which a man could go to register and be guided to his work, if he could have an opportunity to have his work correlated, if he could have the assistance of the man with whom he wished to work, then I confidently believe that there would be a very large number of students who would take advantage of the unexampled collections and libraries of Washington.

To make these facilities still more available, it would be advantageous for the various universities of the country to co-operate with the Washington authorities. In the catalog of a university it might be well to announce the particular lines of work and the advanced courses which could be advantageously taken at Washington best to supplement the work done at the university. Such co-operation would even more clearly emphasize the fact that the plan for a national university at Washington is not one to compete with existing universities, but to supplement them. Of course, no university could be compelled to co-operate as suggested, but it can scarcely be doubted that a large number would enter into co-operation, since so doing would be to the advantage of their students. Thus it is believed that the proposals made, if adopted, will result in a great gain to science in the country and also be of direct advantage to existing universities.

It is to be noted that the plan outlined does not include that of granting degrees. The fundamental thing advocated is that the country gain the advantage of the opportunities which exist at Washington, which it may do with comparatively little additional cost. To accomplish this it is not necessary that the departments undertake the task of examinations, the approval of theses, and the awarding of degrees.

If there be prejudice against calling the institution above described a national university, it may be given some other name, since as a matter of fact the institution proposed would be different from any existing university in that it would not profess to give a complete system of courses regarding any subject, but would give such specialized courses as the facilities at Washington make advantageous; and also it differs from a university in the respect that it would not grant degrees. For my own part I do not particularly care whether or not the institution of which I speak be called a national university; but I am most anxious that the great opportunities at Washington, both in the way of materials and men, shall be available as instrumentalities for advanced research, and that this shall be a national asset.

PROPOSALS APPROVED BY STATE UNIVERSITIES

The proposals made are in perfect harmony with the plan for the establishment of a national university, approved by the National Association of State Universities. In the bill introduced into Congress with the sanction of the association, it is proposed that the essential idea of the national university be opportunity for study, not the granting of degrees. It is further proposed that no student shall be permitted to work in the various departments until he shall have had the degree of master of science or arts, or equivalent training. This would require that a man shall have his first degree and shall have pursued graduate studies for one year and thus have gone far enough in advanced work to become qualified to begin a piece of special investigation. After a student has continued his work at Washington to the point where he should have a doctorate, he may take his examination and qualify himself for his doctorate at the institution at which he previously studied, and thus add to the prestige of that institution. Naturally a part of such qualification would be a thesis prepared by using the material in the bureaus and departments. If the universities outside of Washington should co-operate with the Washington scientific staff, a student at Washington might be to a certain extent under the guidance of the university from which he came, and by this means his entire graduate work be made a harmonious whole.

NOT A RIVAL TO EXISTING INSTITUTIONS

Thus the proposed national university would not be a rival to existing institutions, but supplementary to them; not supplementary to one of them, but supplementary to all. In Germany it is the habit of students when

studying for a doctorate to spend a part of the time at one university and a part at another. In some cases the work for the doctorate may be done at more than two institutions. The plan to have the departments at Washington available for advanced work would undoubtedly result in giving to many students a broader training than they now secure because of the fact that they would do a portion of their advanced work in a university and a part in the research departments at Washington. This arrangement would be most advantageous, for a part of the work would be done in institutions where the spirit is that of a university, and a part in the bureaus where the spirit is that of immediate results; and it is the combination of the ideal and the practical in a man's education which gives the highest capacity for future useful service to the nation.

SUMMARY

In summary:

1. It is proposed that the unapproached wealth of books and materials at Washington for research be made available to the advanced students of the country having the baccalaureate degree and one year of graduate work or its equivalent.

2. It is proposed that the scientific staff at Washington be authorized as a part of its official duties to give a limited amount of instruction.

3. It is proposed to establish an administrative division, the duties of which shall be to make the facilities of Washington known and to guide the students to them. If desirable this division may be made a part of the National Bureau of Education.

4. It is proposed that a student completing his work for a doctorate at Washington be granted his degree from the institution from which he came.

5. It is proposed that existing universities co-operate in this work with the departments at Washington.

If this plan be adopted, it cannot be gainsaid that science in America will receive a great impetus; that the scientific bureaus at Washington will be inspired to escape from their bureaucratic bonds at least in some measure, and if so they will make larger contributions than heretofore to the advancement of learning. All the above results may be accomplished by a relatively small expense and to the mutual advantage of the United States departments and existing universities.

C. A NATIONAL UNIVERSITY AS RELATED TO DEMOCRACY

JAMES H. BAKER, PRESIDENT OF THE UNIVERSITY OF COLORADO, BOULDER, COLO.

In reviewing the history of the movement for a national university, one is impressed with the great names connected with the project, the strength of the reasons in its favor, and the increasing clearness of thought regarding the need and functions of such an institution. Still more impressive are the high ideals for democracy maintained by the many advocates of the cause. The affirmative arguments have always appealed to me as funda-

mental, broad, and far-sighted. They show a comprehensive and hopeful view of civilization.

That the conception of a national university, and even the reasons for its need, should change in more than a century was to be expected. But, from the first expression of the idea by George Washington to the present, its scope was to be greater than that of existing American universities. The plan as it now appears may be described briefly: At the national capital are scores of departments and bureaus connected with the government, which might contribute to various lines of research. Vast sums are invested in libraries, museums, and laboratories. A large body of scientific men are employed in what may be called the educational service of the departments. It is proposed to establish by act of Congress a university of the United States; give it a board of trustees guarded from political bias and influence; include the scientific agencies, mentioned, in the university scheme; invite the co-operation of various organizations privately endowed; choose a faculty of eminent men, including those now prominent in the scientific work of the government, whose duty, in conjunction with the trustees, would be to utilize present resources and plan lines of future development. Of course the proposed plan would necessitate adequate buildings independent of the various departments of the government, and large financial support. The functions of such an institution in many fields of applied science are obvious. But its scope would rapidly enlarge. To some extent facilities are now found in the departments for special investigation in the natural sciences, agriculture, engineering, and medicine; in history, political science, economics, and law; in anthropology and education; in literature. In a university organization these would be strengthened and supplemented. A national university should represent profound scientific knowledge, its application to the practical needs of the country, the study of all economic, political, and social problems, every phase of human betterment, in short all that pertains to the welfare of a people. Moreover, it should aim to enlarge the boundaries of knowledge, to teach an idealistic philosophy, and to emphasize the spiritual side of our civilization. And all this should be done to an extent and with a thoroness possible only in such an institution. In other words, there should be at the center of government, as the highest interest, complete opportunity for studying the vital problems of the nation.

History does not show an exact parallel to our proposed national university, altho two noted institutions are suggestive examples, the University of Berlin and the University of Paris—one the Royal University of Prussia, the other the most prominent national university of France. For a century the University of Berlin has been a great factor in the growth of Prussia and a surpassing influence far extended on university standards and ideals. The University of Paris, by its relation with many educational agencies of the great capital, will create a new chapter in the history of education.

The remarkable development of Germany has been due in no small part

to the intimate relation of higher education to the state. More than a hundred years ago great leaders in Prussia saw in it the means of increasing the strength of the nation. They understood the vital force of an education that seeks foundation principles, that increases knowledge, that gives power of appreciation, that opens up large spiritual visions, that places men trained in scientific power at the service of the state. They knew that its influence in time would pervade the whole nation and change the spirit of the people. The University of Paris, under its present organization, comes nearest to our conception of a national university. It has its own buildings and faculties, but it has also a co-operative relation with many centers of liberal and scientific knowledge in Paris. The national and municipal resources for study and investigation are serviceable to the University. While organically Oxford is not a national institution, yet in a more important sense, in spirit and history, it has been closely related to the political affairs of England. It has represented state, church, and the form of society. That it has been a large factor in England's greatness goes without saying.

It has often been argued that an independent foundation should take the place of a national university, or that some private agency should control the resources of the government for research. The contribution of independent colleges to learning in the past and their value for the future are not questioned. They represent an element of freedom helpful in progress. But this proposition defeats one of the chief purposes of a national university, namely, its reciprocal relation to democracy. Moreover, to intrust the control of the government bureaus to any private organization would be an obvious absurdity.

It is claimed that education is not a function of the general government. In avoiding some Old-World evils we limited the powers of Congress, but the constitutional argument against a national university has never been taken seriously. Moreover, it was never intended that Congress should be merely a lawmaking machine without the higher motives and interests. And here I may speak of that larger view of the functions of government which extends beyond police regulations and commercial affairs. In the Old World are seen everywhere evidences of a culture which has been fostered by a broad governmental policy. If rulers had never been the patrons of art and letters, our civilization would be less rich in its most valuable elements. Here is a vital question in studying the problems of democracy.

The national commissioner of education some years ago said he did not dare to ask for a fuller recognition by Congress of his bureau, fearing it would be abolished or made a political asset and be used for patronage. The Bureau of Education was then housed in a building hardly fit for a tenement, the office force was limited, and the commissioner was on a starvation salary. We are familiar with the recent efforts to increase the

extent and efficiency of the Bureau of Education, and the reluctant consent of Congress to enlarge the appropriations. I do not note this as evidence of difficulties in our way, but to prove the need of a university, backed up by all the ideal forces of the nation, to educate Congress. The congressional wagon is not hitched to a star; the statesman's vision does not always reach to the hills whence might come his help—perhaps that is not to be expected. But critics of the times claim that the whole spirit of legislation is materialistic when not political and partisan; that appeals on ideal grounds are little heeded; and that the chosen representatives of the nation fail to lead democracy, even when the occasion and duty are obvious. The interests of government should be enlarged. We need a keener knowledge of the elements of civilization and of the meaning of democracy. One of the first steps would be to give our representatives something to think about besides politics and business. A national university at the capital would be an ideal influence and indirectly would act upon the whole country. It would tend to bring into direct union the ideal and the practical with mutual benefit—the academic atmosphere would be clearer, and the political atmosphere would be purer.

My argument now is not on the practical value of a national university —that it would correlate and economize and make more efficient the scientific agencies in Washington, that it would be the means of studying every problem of universal interest, that it could organize the work of every important investigation and get the co-operation of the universities of the country, that it would aid and strengthen and stimulate the scholarship of all the universities, that it would increase our material welfare, that it would foster our national pride and patriotism—my argument is concerned with the deeper thought of a union between democracy and higher learning.

In Germany higher education is related to the state; in America the problem is far more difficult—to relate it to democracy. A few educated men at the head of affairs can value science and culture; pure democracy in its formative stages may be shortsighted, fail to see its own true goal, and even be suspicious of the means of attaining it. Democracy in its present form is on trial—a trite but true remark. If its only gods are those of prosperity, if education is to be superficial and purely practical, if we refuse to think, if business engages in Middle-Age baronial exploits and politics is "bossed," if "reactionaries" and "progressives" get farther apart, we may be compelled to serious thought. Will the people as such have the vision and aim at the best the centuries have produced, and the progress the future demands? The problem is to be worked out in freedom, and, if successfully, in accord with true principles. Responsibility fits for responsibility, and the rule of the best is secured thru freedom—a maxim which Gladstone often vigorously proclaimed. I believe we shall have a safe and high development of our civilization when essential university learning relates itself to every human interest and problem, and the people strive

for, and make their own, all that the best in learning and leadership represents. A gentleman recently wrote me, urging the

> University of Colorado to form a "University Educational Union," and make the best thought in the world on political and economic science accessible to each individual, and let him form his own conclusions therefrom. I am convinced that the organized universities, or enough of them organized to give the stamp of authority, can furnish a peaceful solution of social problems.

This may be visionary, but it is mightily suggestive. The "reactionary" with all he stands for, and the "progressive" with all he stands for—I am using the terms broadly—must find a common ground in this country or worse follows. The ground of safety between extreme doctrines of government, between contending factions, between classes, will be found by the closest union between education and democracy—thru enlightenment and ideals. Culture, pure science, social justice, absolute values must be erected in our pantheon as well as the gods of success. These must command the reverence of the people and stand for the spirit of government and of public officials. Education—its knowledge, its ideals, its influence—must be the fourth estate in a democratic government. And it will be the duty of the educational forces of the country, in conjunction with every wise leader, to inject new elements into public affairs. And here is the real argument for a national university. If the character of this institution is to differ from existing types, if its scope is to be larger than formerly conceived, it is because we have a clearer insight into the nature and extent of the problem of civilization—a problem not confined to this country but world-wide. Universal education, necessarily superficial, and now increasingly practical, will not suffice. The organization of society must rest on a basis of truth and justice—the ideals of the scholar. The fundamental knowledge of nature and of man in society must be sought in an institution having profound learning, creative power, broad sympathies, and unlimited resources for investigation. In one of the states there is a close relation between the people, the government, and the university. The experiment has awakened large interest; it is yet new, but hopeful. This idea enlarged suggests the function, and the relation to the country and the world, of a university of the United States. The traditional culture, isolated if not often selfish, is a thing of the past. The modern university spirit is not only cultural, but scientific and practical, and is related to real life and today's problems. We have now to make it intimately a part of our government and society. When the people no longer depend upon authority, they must conform to what the philosophers call the "nature of things"—essential relations revealed definitely by the clear insight of the scholar.

Discussing, a few years ago, with a professor in the University of Paris some question of the enterprise of the two governments in issuing educational literature, he said:

I know the business quickness of the American, but we are wedded to a past which we cannot get rid of, and which, to be frank about the matter, we do not wish to get rid of. There are elements in our civilization, of essential value, which it will take the New World a long time to understand.

I could only reply that there was no controversy on that point. This represents a foreign criticism common enough, and to an extent just. "We are busy doing things and have no time to think," is a common boastful claim. We have been buying our education abroad, as we are now playing refined robbery with the art treasures of Europe. We need to transmute some of our wealth into science and art at home. There is no danger so great as a dead level of democracy, holding back the ideal spirit struggling to free itself. The people must be led by the wisest, and they must see that real excellence in a few is for the good of all. If we are to gain the respect of older civilizations, we must show that democracy is not superficial, that it has a high ideal of government, that it can be fertile in scholarship and especially in appreciation of its value and service. The "glory that was Greece" will never be ours, unless our ideal is built of spiritual elements that have given leading nations their place in history. If we have a boasted new form of state and society—the body—we must see to it that we have also the new humanism and the new idealism—the soul. If we have a unique civilization, if we have a peculiar mission, then let us have an unequaled center of learning at the very heart of our national life, adequate to reveal that life to ourselves and the world.

D. WAYS AND MEANS: THE NEXT STEPS

WILLIAM O. THOMPSON, PRESIDENT OF OHIO STATE UNIVERSITY, COLUMBUS, OHIO

The idea of the national university has one quality: it persists. Many educators have not been favorably disposed, while others have been firmly of the opinion that such an institution is the logical and highly desirable, if not necessary, conclusion from a century of national experience. The legislators and promoters of national legislation have been so much occupied with questions of statecraft and political expediency that but few men in our congressional halls have either time or disposition to give the project attention sufficient to warrant an intelligent opinion. The practice of objecting is easily cultivated and the suggestion that education should not be under the control of political influences is an easy method of closing the way to a thoughtful consideration of the merits of the issue. It should be recognized at the outset that a proposal for a national university would face these and other objections. Congressmen and senators have a way of paying profound respect to the opinions of educators when they open the way of escape from any responsibility and leave them free to devote their

energies to questions of political expediency and to the favorite industry of re-electing themselves. It may be recognized that a large amount of time and energy is spent in this way and that no important issue or principle is involved in such activity.

Education is not a political issue. Office-holders recognize this fact and therefore are slow to give it any consideration. Even agriculture, now the most popular diversion of the time, could not secure the large consideration given it were it not for the fact that there are votes behind it. Agricultural extension and farm demonstration have already become valuable political assets for congressmen and there are indications that the further development of these praiseworthy objects will be associated with a powerful and pernicious political influence.

A national university makes no such appeal, for the reason that it would be devoted to the less tangible phases of education. The study of research problems in pure science or in a true interpretation of history, economics, or politics does not make the spectacular appeal to legislators. It is easier to visualize the beneficent effects of two blades of grass or a large yield of corn and cotton than the effects of a revision of the scientific hypothesis concerning molecules, atoms, or electrons.

The first fundamental problem, therefore, is to set out and get into the national consciousness a true conception of the value of a great national graduate institution that should utilize for educational purposes the resources of the government already accumulated and increasing every year. The assumption is often made that existing educational agencies may be relied upon to care for all the research work needed. As a matter of fact they have but a limited access for such purposes to the resources of the government. Well-advised people know also that government officials hedged about with the technicalities of Washington have not sympathized with the movement to make any use of these resources for the further development of science and education.

A few years ago the Association of Agricultural Colleges proposed the utilization of a portion of these resources for the purposes of graduate study and investigation of fundamental scientific problems in agriculture, with the purpose of developing better equipped scholars in the sciences related to agriculture, but met with indifferent success. Men hesitate to welcome any new movement that might interfere with autonomy or prerogative. There is but little general intelligence upon the opportunities now in possession of the government for the advancement of learning and of science. The result is that very little enthusiasm is aroused when a proposal to utilize those opportunities is made. Existing agencies, especially our universities and colleges, are making the most limited use of them. The further statement is probably true, that they never will use them with high efficiency. There is no reason in the nature of the case, then, why colleges and universities should not urge a national movement in the interest of

science and scholarship that would organize the resources of the government into available material for study and research.

The notion that a national university should be so organized as to be a competitor with existing colleges and universities for students or for money is not worthy of any time or consideration. Such a university would not be a place where thousands of students would congregate but, let us hope, a place where the most eminent scholars of the country could be gathered, often temporarily, from existing universities for the purpose of leadership and counsel with matured students already graduates from local institutions. Our first need, then, would seem to be an appreciation of the unused opportunities at hand and a national conviction that these should be utilized.

A second problem is to secure a consensus of intelligent opinion as to the general scope and purpose of such a university. As already intimated, its purpose could not be found in the idea of competition. It must crown rather than compete. For years the federal government has been engaged in scientific work of a most important character. The Weather Bureau, the Geological Survey, the Bureau of Mines, the Department of Agriculture with its varied projects, all suggest a large amount of scientific and educational work. The motive in these has been the public welfare and national self-preservation. There would be no disposition to interfere with or check such important agencies. These have demonstrated that there is a large unoccupied field for the most valuable service. Any student of the history of scientific research in this country will say that the limitations are painfully evident. The permanence of men and money and the organization free from these limitations is most fundamental. In the course of the years cabinet officers and members of Congress have learned something of the importance attaching to the scientific work of the government, while but few men have risen to a conception of the importance of a university organization that, with the hearty co-operation of universities and scholars, would stimulate and aid every educational enterprise in the country.

It is interesting to observe that in case of the most widely known agencies of the government in scientific endeavor like agriculture, mining, and others, but few people were enthusiastic at the beginning. The reasons were two: first, a theory that the government had but a limited police power; and second, a lack of appreciation or belief that pure science had any practical relation to the everyday problems of the people or of government. Both of those theories have been abandoned and we are now trying to urge a further advance and a university organization for the utilization of unused and unrecognized opportunities. My second appeal must be, therefore, for a study of the situation by the teachers and scholars of the country in order that a consensus of opinion may result. This will give us a basis for action.

A third step might be the agreement upon a bill that shall serve as a

charter with a comprehensive plan of operation. Most of us are familiar with the form of the bill so long advocated and pressed by the late Hon. John Wesley Hoyt. This provided for an undergraduate organization and for that reason probably failed to enlist enthusiastic support in many quarters. It had, of course, the opposition of all those who could not agree to the idea of a national university and to the idea of federal aid to education. These objections would continue against any bill that could be drawn. The National Association of State Universities drew a bill a few years ago providing only for research and graduate work and requiring a Master's degree or its equivalent as prerequisite for enrollment and omitted any provision for the granting of degrees. This, of course, met with some opposition but chiefly outside of the constituency of state universities. The important issue now is an agreement upon a measure that will recognize existing agencies of research and of education and yet make provision for doing what is not now done. The crowning of our democracy with a distinctly national movement in the interest of education, of scientific research, and the discovery of problems affecting our national life is a project that should have the leadership and support of educational statesmen. When our ideas are cleared up and put into a systematic and defensible form we shall have taken an important step toward the realization of the vision that has been before us for a century.

A fourth step I suggest is the education of Congress. It has taken years to gain the assent of that body to other ideas of importance. This is by no means a reflection upon legislators but a testimony to the fact that the American people move slowly in projecting great and far-reaching movements. I need only cite the Land Grant Act led by Hon. Justin S. Morrill in Congress. This was the outcome of long debate and much discussion, then vetoed by President Buchanan, and finally enacted in 1862 under President Lincoln. The Panama Canal is another example of doubt, debate, delay, and final decision. Congress is still uncertain as to the propriety of federal aid to education. Many people in the country share in the doubt. Those who believe in the theory have yet a large amount of work before assent may be given. The agricultural college and experiment station movement avoided the direct issue under the plea of conserving the soil and of perpetuating national welfare. The vocational bill now before Congress follows in the same general plea by making appeal to the industrial interests of the nation. I doubt whether either of these measures is entirely justifiable on so narrow a basis. The broad issue is whether education is an interest of all the people or a local issue of the states. There is also a constitutional question as to the power of Congress in appropriating money and the objects for which it may make appropriations. The plea that the states are able to provide all the means necessary for education does not meet the case. Grant that they are able, the basic question remains as to the relation of the federal government to the cause

of education. The disposition to avoid the question is quite apparent. That there is opposition of an honest kind to federal aid is beyond question. Before any active movement for a national university can gather much strength this question must reach an affirmative answer. The traditional interpretation of our Constitution has been to leave the question of education to the states. It should be noted, however, that in disposing of public lands in the Northwest Territory and in the several land grants by Congress, it is plainly discernible that the support of education was regarded as an equitable distribution to the people of public resources. When the people and their rulers can be brought to see that higher education and the highest or deepest education as well as the advancement of science contribute to the welfare of all the people without regard to state lines, it will be easier to interpret the public-welfare clause of the Constitution to be in harmony with the scheme of national education. This will not be done by legislators, lawyers, and courts until the educators of the country have made the principle so clear that popular opinion both approves and demands action at the hands of Congress. An ignorant people rarely founds colleges. The leaders, carried forward by their ideals, lay the foundations and await the verdict of the future. So long as the country remains in ignorance of the need or opportunity of a national university, its existence may not be anticipated. So soon, however, as intelligent co-operation on the part of the educated people brings into the national consciousness a conviction that the federal government may return to the people for education a reasonable proportion of the revenues gathered from the people, it will be as easy to build a university as to build a warship. As a matter of fact, the defense which we provide thru the agency of a warship is usually imaginary while the ends sought thru the activities of education are at least intelligible.

A fifth step I propose is the development of popular sentiment. The national university proposal as I see it is a challenge or perhaps an inquiry as to the powers and privileges of the people. Have we, by adopting a Constitution, entered into contract with ourselves that education is none of our business; that it is a local issue and must find all its support and inspiration from local organizations? Or is it a question of a progressive interpretation of that great and notable contract in the interests of life, liberty, and the pursuit of happiness as well as in the interest of wars, rumors of wars, and other ignoble ends?

For a long time we have interpreted our Constitution to mean that the public money—that is the people's money—might be expended for the protection of life and property. To this there is unanimous consent.

The national university proposal raises the question whether the people may spend their money for the development of life and property. Happily we have been approaching that issue steadily. The developmental functions of government have been steadily increased and we are now proposing to go a little farther and ask the federal government to co-operate in a

constructive way by encouraging education, thus bringing help and strength to every educational enterprise of the land. We are not asking the interference or destruction of existing institutions or systems of education, but we are asking that the people and their officers take a national vision of this most fundamental work of society and establish an institution that shall be a crown of glory to all our educational effort.

I am aware that some are objecting because they fear the results or doubt our ability. Let me assure all such that there need be no fear for either individual or institution from a government or an institution of a government operated in the interest of the people. I have known college presidents who sincerely believed that the prosperity of one institution was at the expense of another. Their political economy was of the old horse-trading type. Happily that has passed away. The new political economy recognizes that education begets the desire for education; that educated people will be able to earn their daily bread; and we are optimistic enough to believe that an educated people will destroy neither themselves nor their institutions. A national university properly conceived is an institution neither of destruction nor of repression but a fitting expression of the purpose of all the people that among other objects public revenues may be used to provide, encourage, and foster education as a sure foundation for national life and the perpetuity of the free institutions of a free people.

TOPIC: THE RELATION OF THE PUBLIC SCHOOLS TO THE MOVEMENT FOR RECREATIONAL, SOCIAL, AND CIVIC OPPORTUNITY

A. HOW A COMMUNITY MAY FIND OUT AND PLAN FOR ITS RECREATION NEEDS

ROWLAND HAYNES, FIELD SECRETARY, PLAYGROUND AND RECREATION ASSOCIATION OF AMERICA, NEW YORK, N.Y.

An architect in his workshop is not a very interesting object, nor are his blueprints, plans, and computations very thrilling. We care more for his results in completed buildings. The same is true of a recreation survey. Results are more interesting than the methods, but I have been asked to give you briefly some account of the methods used in a recreation survey, in order to show how any community may find out and plan for its recreational needs.

The purpose of a recreation survey is to help in planning for an adequate recreation system, one which ministers to the whole recreation life of a community. This recreation life may be roughly divided into that which is occupied with home recreation, private recreation, commercial recreation, and public recreation. An adequate recreation system includes all these parts, and a public recreation system seeks not to compete with

any of the other parts, but to supplement home and private recreation, to exercise oversight over commercial recreation, and to furnish opportunities for wholesome public recreation to those who are not otherwise cared for.

In several cities it has been found that, while from 50 to 70 per cent of the entire recreation life is being cared for after a fashion by home, private, and commercial forms, of the remaining 30 or 50 per cent which would naturally fall to the care of public recreation, only 5 or 10 per cent is being handled by such agencies. In short, it has appeared that public agencies are doing only about one-fifth of the work which comes to them. Where there is such a large field to cover, and where there is no community in the country which is at present adequately covering the balance of the recreation life which would naturally fall to public agencies, it is of prime importance that any development or extension of a recreation system in any community, large or small, should be based on such a study of its recreation conditions that there shall be no duplication and waste.

A complete recreation survey of any community would take the form of a census, telling for each member of the community how much time each week during the different seasons of the year he or she has for recreation; how and where this time is being spent; and, where the recreation is not of good quality, what are the recreational needs of different groups. Such a complete census would take from two to five years, according to special conditions in each community. A preliminary survey, however, is often necessary in planning the foundation of a recreation system. It is of such preliminary surveys that I am speaking in this paper. They should not take more than one to six months, according to the population of the place in question and the number of workers.

Such a survey should cover three main topics: first, recreation activities of the three chief groups in any community, namely, the school group, the unmarried working group, and the home group; second, facilities and supervision; third, plan for development. The purpose of the study of the activities of different groups is to show what they are doing in the way of recreation, and what each main group needs. The second part of the survey, that on facilities, should show precisely what the city already possesses in the way of facilities, in school plant, park plant, libraries, museums, streets, etc., and what supervision it already has in the working force of all of these departments. Such a study of facilities should come to some definite conclusion as to what the city has available to meet the needs which have been shown in the study of the activities and exactly what further facilities the city would need to secure in order to build up an adequate recreation system. The third part of the survey should present a definite plan whereby the facilities which the city possesses may be used to meet the needs which the city has been shown to have. It should also outline the steps whereby needed new facilities may

be secured, and it should consider the form of administration and the unification of supervision.

The first step in the actual survey is to get all the relevant facts already assembled by other people. Thus the census report will give figures for computing the density of population in different wards of the city; the school census, if correctly taken, will indicate the distribution of children in different parts of the city. Social workers in settlements, charity organization societies, and similar associations can give preliminary hints of the recreation conditions in different parts of the community. If any studies of housing conditions, or of conditions of factory or department-store employment have been made, these will furnish useful hints.

Following this bird's-eye view, the next step is a study of the amount of outdoor play space in different neighborhoods. Usually, to save time, it has been necessary to select a limited number of definite districts or "soundings," and study those with particular care. Such a study makes possible a statistical table showing what percentage of space in any given sounding of 50 or 100 acres is taken up with streets and alleys; what percentage of space is taken up with private yards so occupied that play is impossible; what percentage is taken up with buildings and interspaces less than 25 by 25 feet—the smallest space on which three or four children can play for any length of time—and what percentage is free play space. In these soundings observation is made of the traffic conditions in the streets, which ones have heavy traffic dangerous for play, and which have only intermittent traffic permitting occasional play. Paving conditions are also noticed, as affecting availability of streets for play. These soundings are taken after school hours, so as to combine with the observation of the amount of play space, an observation of what the children and young people outdoors are actually doing.

In some places the children in the upper grades of the grammar schools have been asked to write on what they do with their spare time. The children are asked to write definitely about what they did in a definite period of time, say last Saturday and Sunday, or last week, and are told, if they say they played, to tell *what* they played; if they say they went to a show, *what* show. Care is also taken that the pupils know that the teachers are not to read the papers of their own pupils. The purpose of the essays is not to display scholastic achievement or to give the pupils a chance to make the teachers feel that they are doing much studying outside of school, but to get the children to write frankly the absolute truth. It is sometimes helpful to have the children not sign their names to these essays, merely stating their age, school, and grade, and whether the paper is from a boy or a girl. Thousands of such papers from school children in different cities have been gone over under my direction, and are sometimes the most illuminating part of the entire study.

The theaters, moving-picture shows, dance halls, penny arcades,

shooting-galleries, amusement parks, bowling-alleys, billiard halls, and other forms of commercial recreation are visited during the course of the survey, at enough different times to be sure that a typical week's attendance is being observed, and if necessary a disguise is used to avoid attracting attention. Likewise information is gathered from private institutions such as churches, lodges, and clubs, and from public institutions like parks, libraries, and museums, to see how much they are really being used for recreation purposes. In getting this information, a record is sought not only of the number of people reached by each institution in a week, month, or year, but also how much of the recreational life of those reached is furnished by the given institution.

When it comes to forming a definite plan for the building-up of a recreation system in any community, certain practical facts must be carefully considered, such as the probable financial resources of any department under which the recreation work is to be carried on, the type of administrators who are likely to control, and the amount of freedom from pernicious political influence possible. Here it is often not a case of any theory of city government, but a case of deciding whether Mr. John Smith, or his successors, in a certain position of power, is likely to be more effective than Mr. Charles Jones, and his successors, in some other position of power.

Some of the surveys already carried on have revealed striking facts. Thus it has been found in certain cities that over one-half the children were doing nothing after school hours, neither playing nor working; that 70 per cent of children were on the streets; that there was less for the girls than for the boys to do in the way of play; that the moving-picture shows were drawing every week a number of patrons equal to twice the population of the entire city; that only from 2 to 9 per cent of the space not taken by streets or alleys was free for play, even in cities not considered very congested; that a number of people equal to one-half the population of a given city were strolling on a given 10 blocks of one street every week.

To show concretely the problem before an adequate recreation system, let us take the illustration of one of the smaller cities surveyed, a place of 130,000 inhabitants. In this city were found 25,000 children and young people who would be dependent on some form of public recreation for the proper use of their spare time. This was due to the fact that, owing to the congestion of population or home conditions, they were unable to secure this wholesome recreation by their own efforts. In this city the school enrollment was somewhat under 20,000 people. Experts have calculated that the amount of recreation time per week varies from 20 to 40 hours with people of different ages. A school system occupies the time of its pupils from 25 to 40 hours per week, according to the amount of outside study required. Efficient, clean-cut habits of thought

and character are developed by the really successful school system. Well-supervised recreation develops habits of quickness of thought, fair play, and teamwork which last thruout life. In point of numbers reached, of hours influenced, of lasting effect on character, the task before a recreation system is not less difficult than that before a school system.

The work of the school systems of the country deserves every dollar appropriated to it, but much of the millions of dollars invested in our school systems is wasted owing to the fact that, outside of school, children form wrong habits due to unwholesome play conditions, and develop traits of character which make much of their school training useless. Because of the size of the task before an adequate recreation system, because of the need of a recreation system to save from loss the enormous investments in schools and other municipal services, because of the call to avoid duplication and waste in the face of this unmet need, many communities are trying to find out and to plan systematically for their recreational needs.

Let me conclude this outline with two quotations from papers written by school children. The first was written by a girl of fourteen:

> In the evenings when I go out to play, or the children round our way, we do not have anywhere to play, because the people that haven't any children fuss if we go in front of their house. There aren't any playgrounds around for us to play in.

The other was written by a boy of thirteen:

> I went to the moving pictures and stayed until late. I would have kicked football, but the people would not allow it because of the dust. I threw a few rocks at some Negroes. For fun I get the football and kick it until I am told to go away, and then I go to the alley. It cuts the ball to have it kicked on the cobble-stones. I with several other boys play on the railroad bridge, jumping, resting from the heat of the sun, and learning to run fast and to do tricks on the ties. If we are careful we don't often skin our shins.

The girl who cannot play because the folks who have no children fuss if she plays in front of their house, the boy who throws rocks at Negroes because he cannot kick a football, are but types of recreation problems. In all our surveys and statistics, we should keep clearly in mind that the purpose of them all is to save and develop character—the character of the children and young people of this country, the most precious asset which it possesses.

B. THE RELATION OF SCHOOLHOUSE ARCHITECTURE TO THE SOCIAL CENTER MOVEMENT

DWIGHT H. PERKINS, CHICAGO, ILL.

The recent form of social awakening known as the "social center movement" is already touching the arts, and making occasion for new architectural forms, since it presents the problem of housing new and

distinctly modern needs. This movement differs from its predecessor, the settlement movement, in that it is purely co-operative, not philanthropic in character. It is one of the latest and best incarnations of the spirit of democracy and, since the public school is perhaps the best expression of our national spirit, and the citadel of our democratic institutions, the relationship between the social center movement and the public school is bound to be natural and fundamental.

A study of the growing use of schools for social and civil, as well as educational, activities will reveal the tendency of the times and the present and desirable relationship of schoolhouse architecture to the social center movement. While this influence has not as yet produced a complete and distinctive type of schoolhouse planning, its effect upon building in general is marked in other directions, and is more and more modifying the arrangement and style of buildings for educational purposes from the kindergarten to the college.

The time has gone by forever when a building with a sufficient number of classrooms and, to some extent at least, ventilated and warmed will be considered an adequate or proper school to house even the recognized present-day needs of a community. We are in the transition stage of growth.

The most obvious effect upon schools up to the present day has been that the front door of the schoolhouse is left unlocked for a greater period each day and for more and more days in the year, so that the key is becoming less and less necessary and ultimately may be thrown away. In other words, the first great change due to the insistence of the public to reclaim its own has been the greater use of school buildings rather than any specific change of form or structure.

This change of use has come about first in the yards, their equipment as playgrounds and their use during vacations, bringing with it directed play. The period of such occupation is expanding to conform to seasons and is overlapping the school term, both before and after summer vacation. A similar overlapping is taking place before and after school hours each day, and that extension is a direct response to the public demands for evening use of gymnasiums and assembly halls.

It is the common thing now to build elementary city schools with thirty or more square feet of playground space per pupil. It is also usual to arrange space for ornamental and experimental gardens and to plan for assembly halls and at least one gymnasium as well as rooms and equipment for domestic science and manual training. It is also common now to see high schools with natatoriums and with two gymnasiums—and to see them located in spacious grounds and athletic fields. Modern high schools include not only large assembly halls but small lecture and society rooms as well. Shops for the many occupations of both men and women are realities; even the lunch-room is not omitted from the high school of today.

An exhibition of plans of new and recently proposed school buildings would be an inspiring revelation of the extent to which the public mind has fixed itself on the enlarged use of schools and the rapidity with which school planning is responding to these ideas. But without waiting for the tangible form of new ideals, the existing features are being thrown open evenings to the parents and to young men and young women employed in the daytime, not only for their education, but for their entertainment and social contact as well.

How shall this be done without interference with the school child and without too great a burden upon the taxpayer? For one thing, by a systematic arrangement of hours which would make possible the use of buildings and equipment already installed and otherwise idle during long periods of time. The expense then becomes limited to the services performed by teachers, play-leaders, and janitors. Of the services of teacher and play-leader, it is not the province of the architect to speak. As to the janitor service and the control or segregation, we can observe existing schools in social center use, as well as social center buildings not connected as yet with our school systems, and learn from them the extent and manner in which the growing demands are shaping our educational buildings.

As to the schools themselves, it has long been the custom to install small separate heating units so that the assembly hall, or public portions only, may be heated in the evening without running the large plant necessary to warm and ventilate the entire building.

The increasing use of impervious materials for walls and floors of assembly halls and corridors lessens the work and expense of cleaning. In some instances the public portions of the stairs and corridors may be chained off to limit the areas accessible to evening gatherings, thus minimizing service, but it is now a recognized demand, usually complied with, that the public rooms shall have separate public entrances. This removes all opportunity for entrance into unused portions during the evening.

One may observe today in many localities school buildings embracing assembly halls with stages large enough and adequately equipped for amateur or professional dramatics, for choral work, for lectures, including stereopticon illustration, and for physical culture exhibitions. One may also see branch libraries with separate entrances and arrangements for school and neighborhood uses of all kinds. These features, with the double gymnasiums and natatoriums mentioned above, constitute most, if not all, of the elements already developed and used in response to the social center idea and the enlarged educational outlook up to the present time. One cannot help observing that the influence of the social center is not limited to the "out-of-hour" periods and to the adults, but that it also broadens and deepens the daytime work for the school children as well.

What, then, shall we say of the influences now at work and of the effects they will produce?

First, what are those influences? What is it that the social center idea demands? Upon what assumptions is that idea based? The basic assumption, I believe, is that education does not cease on commencement day; that it is a never-ending process and the so-called school of life may be augmented vastly by continuing its partnership with the established educational institution to the end. Also, that the full education of the child demands co-operation and interested acquaintance with the school on the part of the parents and, as embracing all of these, that no community can rise to its greatest possible development without that experience, in realized and applied democracy, which seizes upon the school as the natural and proper instrument for its educational, social, and recreational functions.

Those functions are, in fact, the ones upon which the permanence and growth of our political and economic freedom depend. The social center idea is, therefore, the movement to acquire the proper conditions for community life. The influences or effects of that idea are felt not only in the school, but in every portion of our civic life, and a study of them may help us to perceive their future course.

We will observe these influences:

First: In the enlarged uses of existing schools, already referred to.

Second: In our parks, playgrounds, and bathing-beaches, and the buildings therein.

Third: In the numerous organized efforts at social betterment, known as settlements, such as Hull House, the Commons, the University of Chicago Settlement, and a dozen others in Chicago, and buildings for similar purposes in every large city in the United States.

Fourth: In the buildings of commerce and industry where one's time is spent after leaving school in activities to which school work is becoming more and closely related.

Fifth: In the Y.M.C.A.'s, the association buildings, and clubs of all kinds.

These have all sprung from social demands and in most cases are free from the dictation of unrelated tradition. From all of these the educator and his architect must learn. We have become accustomed to saying, with John Dewey, that education is life and that we learn by doing, but we seem unaware that the same principle applies in architecture, and that in schools, more than in any other class of buildings, it is imperative that one be governed by principle rather than tradition, that needs should govern structure and form.

It must be admitted that the park, library, and settlement boards have blazed the trail which boards of education must follow, for all must unite to establish all these efforts on a firm economic basis by wise co-ordination of public agencies. Why should one of my dollars be spent by a park board, another by a library board, still another by a school board, and a fourth contributed more or less understandingly to be spent by a settlement board, when all four are for the same essential purpose and could be administered to double or treble the advantage if done by one agency, according to one plan in one group of buildings arranged to avoid wasteful duplication of construction and maintenance?

We need to understand that the newly devised systems of scientific management of private business apply equally well to civic and social affairs. When can such waste of money, and the waste of the more precious time of people, young and old, be stopped? Not until the educators apply in their buildings what they are already applying in their teachings. Not until in their buildings, as well as in their teachings, they prepare and arrange for all phases of life, will proper organization of the numerous separate and wasteful agencies take place. Wise consolidation would conserve the public resource which is ample for all our needs, if waste be eliminated and increased efficiency be secured.

The influence of social centers is toward the promotion of such consolidation. That influence is now operative; it responds to a social hunger which is as real as bodily hunger, altho it may not be named and labeled. It has already begun to show itself in some of our high schools where the various educational activities are housed in separate buildings, capable of separate opening and use, but connected with each other by covered corridors and in buildings separated sufficiently to remove interference by one with another part, but where all are grouped around one central or academic portion.

This educational, social idea has shown its progress in the construction of gymnasiums and swimming-pools which are intended for public use at all periods of the year, not interfering with student use, particularly in summer, when the classrooms are closed. It has also found expression in the small lecture-room where "high-school extension" work, similar to university extension, can be carried on, and in rooms for clubs, societies, and organizations of minors and adults.

But of the future—what is to be the influence of social centers in our schools?

First: It will demand and ultimately produce a real solution of present-day problems still unsettled; that is, it will cause a system of lighting that shall protect the eyes without the loss of architectural effect or interior finish.

Second: It will demand real ventilation with humidity and not too much heat, repeating more nearly than we now think possible the conditions of out-of-doors.

Third: Sanitation, ease of cleaning, must be accomplished. Impervious floors, now common in corridors, must be introduced into the classrooms. The dirt-holding maple floor, with its countless joints, must go, to be replaced by a floor with the qualities of asphalt, plus good color. This will make the usual fixed seats impractical and cause a substitution of portable school seats and desks. The result will be greater sanitation and greater flexibility for varied uses as well. The fixed seat must go.

Fourth: Fireproof conditions are assumed—that requirement does not need restatement, but it should carry with it impervious wall surfaces as well, for sanitary reasons. These can be built and colored so as to satisfy æsthetic and homelike desires.

Fifth: More land will be required and provided. Most of our problems can be solved by appropriating more land. Land for light, land for air, land for play, land for beauty, land for changes, land for growth, and land for lower buildings.

The one-story top-lighted school has already been built. It is being repeated. The cottage unit, properly grouped, must come. The large, forbidding, overpowering institution must go. The unfortunate classes now have the advantages of the cottage plan. Why should the advantage not be enjoyed by the normal child as well as the — I was going to say bad one, but instead I will say the uneducated child?

Sixth: Schools are located in all residence districts as close to houses as possible. This is merely for convenience. Today country schools for city children are not feasible, but with increased transportation facilities properly safeguarded, what is the reason that our children cannot be taken to the country daily for schooling? This is not altogether new. In a certain school in Denmark they have been doing it for forty years or more. The children study one-third the time, work one-third, and play one-third, and enjoy life all the time.

One of Chicago's most valuable public-spirited citizens was brought up in this particular school and does honor to the system there employed.

The land question will not be so difficult under such a scheme. Remote schools do not conflict with the social center idea. The word "center" is not be taken in a geographical sense, but instead, in a human sense.

Seventh: The idea will ultimately compel schools with smaller units but more of them in one group. Ultimately separate high schools—except for specialized technical training—will disappear to be replaced by schools built for twelve or thirteen grades instead of eight or nine. Instance, the normal school at Normal, Ill., where this idea is already being built.

Eighth: I am optimistic enough to believe that when the public demands such schools as these it will have become so intelligent that it will no longer permit architects to inflict designs executed in old, dead, and inappropriate styles; that eventually the imperialism of Rome and the debasing sham of American galvanized-iron imitations of Rome will be rejected to be replaced by a style at once direct, honest, modest, sensible, enduring, and beautiful. Then, and not till then, can we consistently preach these manly and womanly virtues to students, for until then the influence of sham and vulgarity in buildings will make itself felt above our words.

If it were in my province, I should like to speak of the political changes which will result from such growth. If the schools train citizens from the beginning with such facilities, there will be a vastly better supply of men and women for social offices. As has been frequently said, the only cure for bad politics is more politics, and I welcome the day when all the functions herein hinted at are added to government.

It will then be everyone's unavoidable duty to become an active citizen. We need not fear sudden change. We know that all growth is gradual. We need only tend in the right direction, and society will do its part.

Our part is to build properly—to build what we do build so that changes and additions can be economically and conveniently made, as conditions develop. By so doing, we shall give to the teachers an instrument of service, making possible the greatest development of the individual for himself and for society. By so doing we shall give heed to the indisputable message now proclaimed by social centers and will demonstrate the true relation of schoolhouse architecture to the social center movement.

C. THE PUBLIC LIBRARY, THE PUBLIC SCHOOL, AND THE SOCIAL CENTER MOVEMENT

ARTHUR E. BOSTWICK, LIBRARIAN, PUBLIC LIBRARY, ST. LOUIS, MO.

The center of a geometrical figure is important, not for its size and content, but for its position—not for what it is in itself, but for its relations to the other elements of the figure. And words used with derived meanings are used best when their original significations are kept in mind. The business center of a city does not contain all of that city's commercial activity; when we speak of the church as a religious center, we do not mean that there is to be no religious activity in the home or in other walks of life; as for the center of population of a large and populous country, it may be out in the prairie where neither man nor his dwellings are to be seen. All these centers are what they are because of certain relationships. It is so with a social center. But social relationships cover a wide field. The relationships of business, of religion, even of mere coexistence, are all social. May we have a center for so wide a range of activities? Even the narrower relations of business or of religion tend to form subsidiary groups and to multiply subsidiary centers. In a large city we may have not only a general business center but centers of the real estate business, of the hardware or textile trades, and so on. Our religious affiliations condense into denominational centers.

In the district of a large city where newly arrived foreign immigrants gather, you will be shown the group of blocks where the Poles or the Hungarians have segregated themselves from the rest, and even within these, the houses where dwell families from a particular province or even from one definite city or village. Man is social, but he is socially clannish, and the broadest is not so much he who refuses to recognize these clan or caste relationships as he who enters into the largest number of them—he who keeps in touch with his childhood home, has a wide acquaintance among those of his own religious faith and of his chosen business or profession, keeps up his old college friendships, is interested in collecting coins or paintings and knows all the other collectors, is active in civic and charitable societies, takes an interest in education and educators, and so on. The social democracy that should succeed in abolishing all these groups or leveling them—that should recognize no relationships but the broader ones that underly all human effort and feeling—the touches of nature that make the whole world kin—would be barren indeed.

We cannot spare these fundamentals; we could not get rid of them if we would; but civilization advances by building upon them, and to do away with these additions would be like destroying a city to get at its foundations, in the vain hope of securing some wide-reaching result in economics or æsthetics. Occupying a foremost place among these groupings is the large division embracing our educational activities. And these are social

not only in the broad sense, but also in the narrower. The intercourse of student with student in the school and even of reader with reader in the library, especially in such departments as the children's room, is so obviously that of society that we need dwell on it no further.

This intercourse, while a necessary incident of education in the mass, is only an incident. It is sufficiently obtrusive, however, to make it evident that any use of school or library building for social purposes is fit and proper. There is absolutely nothing new nor strange about such use. In places that cannot afford separate buildings for these purposes, the same edifice has often served for church, schoolhouse, public library, and as assembly room for political meetings, amateur theatricals, and juvenile debating societies. The propriety of all this has never been questioned and it is difficult to see why it should not be as proper in a town of 500,000 inhabitants as in one of 500. The incidence of the cost is a matter of detail. Why should such purely social use of these educational buildings—always common in small towns—have been allowed to fall into abeyance in the larger ones? It is hard to say; but with the recent great improvements in construction, the building of schools and libraries that are models of beauty, comfort, and convenience, there has arisen a not unnatural feeling in the public that all this public property should be put to fuller use. Why should children be forced to dance on the street or in some place of sordid association when comfortable and convenient halls in library or school are closed and unoccupied? Why should the local debating club, the mothers' meeting—nay, why should the political ward meeting be barred out? Side by side with this trend of public opinion there has been an awakening realization on the part of many connected with these institutions that they themselves might benefit by such extended use.

Probably this realization has come earlier and more fully to the library, because its educational function is directed so much more upon adults. The library is coming to be our great continuation school—an institution of learning with an infinity of purely optional courses. It may open its doors to any form of adult social activity.

There are forms of activity proper to a social center that require special apparatus or equipment. These may be furnished in a building erected for the purpose, as are the Chicago fieldhouses. Here we have swimming-pools, gymnasiums for men and for women, and all the rest of it. A branch library is included and some would house the school also under the same roof. We may have to wait long for the general adoption of such a composite social center. Our immediate problem is to supply an immediate need by using means directly at our disposal. And it is remarkable how many kinds of neighborhood activity may take place in a room unprovided with any special equipment. A brief glance over our own records for only a few months past enables me to classify them roughly as athletic or out-

door, purely social, educational, debating, political, labor, musical, religious, charitable or civic, and expository, besides many that defy or elude classification.

The athletic or outdoor organizations include the various turning or gymnastic clubs and the Boy and Girl Scouts; the social organizations embrace dancing-classes, "welfare" associations, alumni and graduate clubs of schools and colleges, and dramatic clubs; the educational, which are very numerous, reading circles, literary clubs galore, free classes in chemistry, French, psychology, philosophy, etc., and all such organizations as the Jewish Culture Club, the Young People's Ethical Society, the Longan Parliamentary Class, and the Industrial and Business Women's Educational leagues. Religious bodies are parish meetings, committees of mission boards, and such organizations as the Theosophical Society; charitable or civic activities include the National Conference of Day Nurseries, the Central Council of Civic Agencies, the W.C.T.U., playground rehearsals for the Child Welfare Exhibit, and the Business Men's Association, and the Advertising Men's League; musical organizations embrace St. Paul's Musical Assembly, the Tuesday Choral Club, etc. Among exhibitions are local affairs such as wildflower shows, an exhibit of birdhouses, collections from the Educational Museum, the Civic League's Municipal Exhibit, selected screens from the Child Welfare Exhibit, and the prize-winners from the St. Louis Art Exhibit held in the art room of our central library. Then we have the Queen Hedwig Branch, the Clay School Picnic Association, the Aero Club, the Lithuanian Club, the Philotechne Club, the Fathers' Club, and the United Spanish War Veterans.

I trust you will not call upon me to explain the objects of some of these, as such a demand might cause me embarrassment—not because their aims are unworthy, but because these are skillfully obscured by their names. If anyone believes that there is a limit to the capacity of the human race for forming groups and subgroups on a moment's notice, for any reason or for no reason at all, I would refer him to our assembly room and clubroom records; and he would find, I think, that these are typical of every large library offering the use of such rooms somewhat freely.

It will be noted that the library takes no part in organizing or operating any of these activities; it does not have to do so.

The successful leader is he who repairs to a hill and raises his standard, knowing that at sight of it followers will flock around him. When you drop a tiny crystal into a solution, the atoms all rush to it naturally: there is no effort or compulsion except that of the aptitudes that their Creator has implanted in them. So it is with all centers, business or religious or social. No one instituted a campaign to locate the business center of a city at precisely such a square or corner. Things aggregate, and the point

to which they tend is their center; they make it, it does not make them. The leader on a hill is a leader because he has followers; without them he would be but a lone warrior. The school or the library that says proudly to itself, "Go to; I will be a social center," may find itself in the same lonely position. It can offer an opportunity: that is all. It can offer houseroom to clubs, organizations, and groups of all kinds, whether permanent or temporary, large or small, but its usefulness as a social center depends largely on the existence of these and on their desire for a meeting-place. We have in St. Louis six branch libraries with assembly rooms and clubrooms—in all a dozen or so. I have before me the calendar for a single week and I find 55 engagements, running from 24 at one branch down thru 13, 8, 6, and 3 to one. If I had before me only the largest number I should conclude that branch libraries as social centers were a howling success; if only the smallest, I should say that they were dismal failures. Why the difference? For the same reason that the leader who displays his standard may or may not be surrounded with eager "flocking" followers. There may be no one within earshot, or they may have no stomach for the war, or they may not be interested in the cause that he represents. Or again, he may not shout loud or persuasively enough, or his standard may not be attractive enough in form or color, or mounted on a sufficiently high staff.

I have said that all we can offer is opportunity; to change our figure, we can furnish the drinking-fountain—thirst must bring the horse to it. But we must not forget that we offer our opportunity in vain unless we are sure that everyone who might grasp it realizes our offer and what it means.

Here is the chance for personal endeavor. If the young people in a neighborhood continue to hold their social meetings over a saloon when the branch library or the school is perfectly willing to offer its assembly room, it is pretty certain that they do not understand that offer, or that they mistrust its sincerity, or that there is something wrong that might be remedied by personal effort. In the one of our branches that is most used by organizations there is this personal touch. But I should hesitate to say that the others do not have it too. There are plenty of organizations near this busiest library and there are no other good places for them to meet. In the neighborhood of some other branches there are other meeting-places, and elsewhere, perhaps, the social instinct is not so strong, or at any rate the effort to organize is lacking. Should the librarian step out and attempt to stimulate this social instinct and to guide this organizing effort? There is room for difference of opinion here.

Personally I think that he should not do it directly and officially as a librarian. He may do it quietly and unobtrusively like any other private citizen, but he needs all his efforts, all his influence, to bring the book and the reader together in his community. Sometimes by doing this he can be doing the other too, and he can always do it vicariously. He should

bear in mind that the successful man is not he who does everything himself, but he who can induce others to do things—to do them in his way and to direct them toward his ends. Even in the most sluggish, the most indifferent community there are these potential workers with enthusiasms that need only to be awakened to be let loose for good. The magic key is often in the librarian's girdle, and his free offer of house room and sympathy, with good literature thrown in, will always be of powerful assistance in this kind of effort. He will seldom need to do more than to make clear the existence and the nature of the opportunity that he offers. I know that there are some librarians and many more teachers who hesitate to open their doors in any such way as this; who are afraid that the opportunities offered will be misused or that the activities so sheltered will be misjudged by the public. It has shocked some persons that a young people's dancing-class has been held, under irreproachable auspices, in one of our branch libraries; others have been grieved to see that political ward meetings have taken place in them, and that some rather radical political theories have been debated there. These persons forget that a library never takes sides. It places on its shelves books on the Civil War from the standpoint of both North and South, histories of the great religious controversies by both Catholics and Protestants, ideas and theories in science and philosophy from all sides and at all angles. It may give room at one time to a young people's dancing-class and at another to a meeting of persons who condemn dancing. Its walls may echo one day to the praises of our tariff system and on another to fierce denunciations of it.

These things are all legitimate and it is better that they should take place in a library or a school building than in a saloon or even in a grocery store. The influence of environment is gently pervasive. I may be wrong, but I cannot help thinking that it is easier to be a gentleman in a library, whether in social meeting or in political debate, than it is in some other places. In one of our branches there meets a club of men who would be termed anarchists by some people. The branch librarian assures me that the brand of anarchism that they profess has grown perceptibly milder since they have met in the library. It is getting to be literary, academic, philosophic. Nourished in a saloon, with a little injudicious repression, it might perhaps have borne fruit of bombs and dynamite.

In this catholicity I cannot help thinking that the library as an educational institution is a step ahead of the school. Most teachers would resent the imputation of partisanship on the part of the school, and yet it is surely partisan—in some ways rightly and inevitably so. One cannot well explain both sides of any question to a child of six and leave its decision to his judgment. This is obvious; and yet I cannot help thinking that there is one-sided teaching of children who are at least old enough to know that there is another side, and that the one-sided teaching of two-sided

subjects might be postponed in some cases until two-sided information would be possible and proper. Where a child is taught one side and finds out later that there is another, his resentment is apt to be bitter; it spoils the educational effect of much that he was taught and injures the influence of the institution that taught him. My resentment is still strong against the teaching that hid from me the southern viewpoint concerning slavery and secession, the Catholic viewpoint of what we Protestants call the Reformation—dozens of things omitted from textbooks on dozens of subjects because they did not happen to meet the approval of the textbook compiler. I am no less an opponent of slavery—I am no less a Protestant—because I know the other side, but I think I am a better man for knowing it, and I think it a thousand pities that there are thousands of our fellow-citizens, on all sides of all possible lines, from whom our educative processes have hid even the fact that there is another side. This question, as I have said, does not affect the library, and fortunately need not affect it. And as we are necessarily two-sided in our book material so we can open our doors to free social or neighborhood use without bothering our heads about whether the users are Catholics, Protestants, or Jews; Democrats, Republicans, or Socialists; Christian Scientists or suffragists. The library hands out suffrage and anti-suffrage literature to its users with the same smile, and if it hands the anti-suffrage books to the suffragist, and vice versa, both sides are certainly the better for it.

I have tried to make it clear in what I have said that in this matter of social activity, public institutions should go as far as they can in furnishing facilities without taking upon themselves the burden of administration. I believe fully in municipal ownership of all kinds of utilities, but rarely in municipal operation. Municipal ownership safeguards the city, and private or corporate operation avoids the numerous objections to close municipal control of detail. So the library authorities may retain sufficient control of these social activities by the power that they have of admitting them to the parts of the buildings provided for them, or of excluding them at any time. The activities themselves are better managed by voluntary bodies, and, as I have said, there is no indication that the formation of such bodies is on the wane. The establishment and operation of a musical or athletic club, a debating society, or a Boy Scouts company, are surely quite as educational as the activities themselves in which their members engage. Do not let us arrogate to ourselves such opportunities as these. I should be inclined to take this attitude also with regard to the public playgrounds, were they not somewhat without the province of this paper; and I take it very strongly with regard to the public school. Throw open the school buildings as soon as you can, and as freely as you can, to every legitimate form of social activity, but let your relationship to this activity be like that of the center to the circle—in it and of it, but embracing no part of its areal content. So, I am convinced, will it be best for all of us—

for ourselves, the administrators of public property, and for the public, the owning body which is now demanding that it shall not be barred out by its servants from that property's freest and fullest use.

D. THE ORGANIZATION AND ADMINISTRATION OF RECREATION AND SOCIAL CENTER WORK

ERICH C. STERN, MEMBER OF STATE LEGISLATURE, MILWAUKEE, WIS.

There has of late been a marked development in a variety of tendencies, familiar to this audience, all seeming to converge toward what is here called the movement for recreational, social, and civic opportunity.

There is, for example, the tendency, upon purely economic grounds, toward a more extended and continuous use of the school plant. People realize that it is poor economy to allow this very expensive system of buildings and play places to stand idle so much of the time.

Again, there is a growing demand for the very facilities which the school plant furnishes. Revived ideals of neighborliness, a new social conscience, the sense of the shame of our cities, stimulate community action thru civic clubs. The need of a neighborhood hearth, so to speak, finds the deserted school buildings and raps for admission.

From within the schools themselves comes a demand for their wider use, arising from a broadened conception of their social responsibilities. Manual training, gymnastics, cooking, gardening, and well-equipped playgrounds bear witness to this broader conception, as do also the evening and vacation schools, and more lately the trade and vocational training schools.

Many of these demands for a more thoro exploitation of the school plant are embraced in another great movement, whose aim is the establishment of social centers, with emphasis upon supervised play and pure recreation.

Apart from the school-realm proper there are kindred factors of great significance. Foremost among these is the National Playground and Recreation Association. This association teaches the need of wisely directed play and recreation, which must be "educational, and yet without any suggestion of the organization or atmosphere of the school."

Another related tendency is found in the increase of municipal functions. In addition to parks and playgrounds, cities are called upon to furnish natatoria, bathing-beaches, outdoor gymnasia, recreation buildings, and neighborhood centers, and to arrange popular entertainment for Independence Day and other holidays in order to render their observance more "sane" and attractive, while libraries are reaching out by means of branches and are actively seeking patronage.

Now all these tendencies are factors in the movement for recreational,

social, and civic opportunity. Hence to unify this movement for purposes of systematic administration, all these factors must be taken into account and their common characteristics discovered. At once it is plain that all these matters have to do with education. Altho public recreation must not be paralyzed by formal education, neither must it be confounded with haphazard play. It is to be educational recreation. In the next place we are struck with the fact that these tendencies are very largely focused upon the school plant which furnishes the greatest facilities ready at hand. Many do not appreciate the full truth of this because they fail to see in the traditional education and old type of schoolhouse any susceptibility for expansion and readaptation. The movement for public recreation is really a movement to make education overflow its previous bounds, both theoretical and physical, and, without disturbing the kernel of formal instruction, to give its beneficent powers a wide scope.

Thus far the component factors of the recreation movement have not been unified, but have been advocated as separate causes by individuals and associations that have led the advance in their respective communities. It was the period of experimentation and of propaganda thru private initiative. But gradually, out of the confusion of many impulses, the sense of relationship has emerged and citizens generally have come up with the leaders. Hence the demand that these related matters be systematically co-ordinated, and taken over and carried on by some regularly constituted municipal authority.

The problem therefore is, What shall this authority be? Shall it be a new and separate agency, or shall it be an already existing department?

The plan for an independent branch of government to carry on this work has many able advocates. It is felt by them that the subject of public recreation is not only of enough importance to be placed under a separate board, but that it is so distinct from other community interests that no existing board can safely be intrusted with its development and administration. This has notably been the tendency where the approach to the recreation movement has been thru the playground rather than thru the school. Hence in many cities the voluntary playground associations of earlier days have been given the dignity of recreation commissions under municipal sanction. An independent board undoubtedly has certain advantages, particularly during the developing period. And such a board is absolutely necessary where existing agencies show a lack of hospitality to the newer functions which may still prove to be properly theirs.

Nevertheless, the commission form of control is open to certain weighty objections, especially if we assume that the period of propaganda and surveys has passed, and the time arrived for a logical, efficient, and permanent method of administration. Americans have become prodigal of commissions. They are born of enthusiasm but soon languish because of inefficiency. They may be very useful to draw attention to a new idea, but

usually fail to develop it. Of course this does not apply to the well-paid expert commissions of modern government, with well-defined duties and large responsibilities. But irresponsible, unpaid boards of "leading citizens" too often prove ephemeral and lacking in the power of sustained effort. And, besides, their multiplication tends toward undesirable confusion of governmental machinery.

Another strong objection to the recreation commission, as a permanent device, follows from the wrong assumption that recreation is a distinct municipal function. Recreation is doubly related to other functions such as the schools, the parks, the libraries. It is related to them, first, in that it proposes to liberalize them, and further because it has to use their facilities. It has almost no tools apart from theirs. Nearly all recreational facilities which our cities have, or are likely to have, are found in connection with the school plant, the park system, the streets, and existing public buildings, all of which are under the jurisdiction of their respective boards. On account of this double relationship, recreation commissions would inevitably entail division of authority between themselves and these other boards; not necessarily hostile conflict, but most certainly ample opportunity for friction, and a dissipation of responsibility which is not favorable to efficient administration.

Another aspect of the problem which casts doubt upon the expediency of a separate department is to be found in the mere size of the administrative machinery required. The fully developed system of recreation will be ubiquitous and coextensive with the boundaries of the cities. To start even a single playground properly you must have a trained supervisor. For a vast system of playgrounds, you will not only need a large number of such experts, but you must have the whole hierarchy of employees, with all the machinery for their fit selection, consisting of a central office force, superintendent, secretary, directors, teachers, and a host of more or less skilled subordinates, down to the caretakers of the grounds and shelters. Now add to this the recreational activities in the parks and streets and within the schools and other public buildings, and it becomes apparent that systematic recreation requires administrative machinery of great magnitude and complexity, comparable with no other department save that under the board of education. But that department has the necessary organization. Would the duplication of this machinery be justified?

If the plan of a separate department be rejected, the next question is, Which of the existing agencies of city government is the logical one to undertake the administration of systematic recreation? Everything that has already been said clearly points to the board of education. It appears that the problem is essentially bound up with education; that the requirements call for extensive and costly facilities and for highly organized administrative machinery. Not only does the school plant extend into

every neighborhood and offer the greatest opportunity for supplying recreation, but in many cities it is now used for this purpose, and in many more the same thing is urged. As for the administrative feature, the school department already has such various subdivisions as music, gymnastics, truancy, medical inspection, manual training, etc. It would be quite simple to add a division for recreation and social centers. With a really worthy supervisor at the head of this division, having at his disposal adequate funds, no reason is perceived why the new work would not thus be most satisfactorily advanced.

On behalf of a separate board it is often argued that, since its sole interest would lie in recreation, it would further this cause with singleness of purpose. But it is to be observed that an even greater concentration of duties would result from the appointment, by an enlightened school board, of a supervisor of recreation. And in addition the supervisor, being a paid expert, would give promise of more continuity of purpose than a commission, while the whole organization of the education department would imply a guaranty of efficiency.

The fact is that, whether or not you have a recreation commission, the schoolhouses and adjacent playgrounds are going to be greatly modified so as to meet the new demands made upon them. When school boards themselves come to take a broader view of their functions, as they inevitably must, they will not permanently tolerate a division of jurisdiction in their domain. Consequently the establishment of a separate board would after all not succeed in finally co-ordinating all recreational activities.

Thru the school board and its supervisor of recreation complete co-ordination in this field can, it is believed, be attained. All playgrounds outside the parks and many other recreational facilities could safely be turned over entirely to such an official. In other cases the matter would have to be left to mutual arrangement between the school boards and other boards. This, to be sure, would still leave some division of authority; but it would be reduced to a minimum, and, being based upon logical grounds, would not often give rise to friction. The average park board, for example, realizes that it has neither the equipment nor the means to carry on quasi-educational work, and will be glad to be relieved of such a burden. The school board, on the other hand, has both the functional and administrative requirements, and its wonderful system of buildings and playgrounds is the very fulcrum of the recreation movement. In its case the question is only one of rising to the occasion.

It is by no means the purpose here to dogmatize. The desire is merely to make some general suggestions based upon an analysis of the recreation movement. Until the separate factors of the movement have been fused thru a realization of their common purpose, their development should be naturally determined by local conditions. Every impulse in the right direction should be gratefully accepted, whether it leads to the establish-

ment of a playground, a social center, or a new city plan. Nevertheless it will aid thoughtful citizens in wisely directing and molding these tendencies to appreciate their inner meaning and the conditions of the problem as a whole. It will prevent them from confounding temporary expedients with permanent organization and administration.

To educational authorities the recreation movement appears to present both a warning and an opportunity. The warning is to be found in a report by an able committee upon this very subject which says that a recreation commission is to be preferred, because school boards lack social insight and cannot appreciate at their real values such phases as hygiene, exercise, pleasure, and informality. Without mental alertness, school boards will soon awake to find the fields of education doubled and trebled, but themselves not partaking of the new pastures. The opportunity which the situation presents to school authorities lies in the chance of assuming the leadership in a new movement of very large significance. Should they do so, formal education will not suffer but will, on the contrary, by reason of broader contacts, be vitalized and dignified.

E. THE SOCIAL CENTER AND THE RURAL COMMUNITY

HERBERT QUICK, EDITOR OF "FARM AND FIRESIDE," SPRINGFIELD, OHIO

The conscious demand for organized social centers is a thing of recent growth. Like most conscious social demands, it springs from a need too long left unfilled. Those of us who feel the call to action in this new cause should if possible formulate to our own minds the need to be met.

The movement has been most vigorous in certain cities. It has taken in some places the form of entertainment courses, closer to the community than the theater or the Y.M.C.A. or the ministrations of the lecture platform. It has thus been urged as a means of bringing literature and art into the neighborhood. But I think it would be a mistake to identify the social center movement with entertainment only.

In other places and at other times it has assumed the phase of offering to neighborhoods dances and social functions of a more local character and a more unobjectionable sort than the similar affairs offered for profit by individual promoters. But I feel sure that the movement means more than social intercourse and amusement.

On other occasions it has sought to bring the people together for the discussion and consideration of sociological and political questions, and for debates and literary exercises. This has been successful in stimulating the citizenship to more active participation in public affairs. But the social center means much more than this, I feel sure. Entertainment, amusement, social functions, political and sociological discussion and debate—these all belong in the picture; but there is an underlying psychological

demand which appears in all these functions and dominates them all. That demand is, in my opinion, the feeling running all thru society that the common, ordinary citizen must learn to co-operate with his fellows as a means of fostering the common good. And when we come to consider the social center as related to the rural community, if the treatment is not to take us outside the field of the social center as ordinarily conceived, we must keep in mind the basis of the movement, the need for co-operative action in neighborhoods.

We are all familiar with the fact that as the nation grows older the people seem in some way to become less homogeneous. The neighborhood fellowship which seems to prevail in European neighborhoods is the outgrowth of the ages. The country community which Hardy limns in his Wessex parishes, or which Blackmore describes to us on Exmoor, or Scott in the lands north of the Tweed seem to possess a neighborhood solidarity altogether lacking in most American communities. We have thought that this neighborship, needing centuries for its growth, might be expected in America as a flower which time will cause to bloom. But American life seems to tend otherwise. In New England where the historic perspective is longest neighborship seems to be weakening as the years pass. The social relations in rural communities in most parts of the Middle West are not as close as in the pioneer times when anyone was a neighbor who lived within ten miles, and the necessity of each leaning on the other in the struggle with nature pressed upon everyone, and there was a felt need for the making of new friends in the new environment. The telephone may bring people closer together, but the trolley, the motor car, the daily mail, and the increasing number of friends which the average farm family has in town, all, with many other factors, take the place of neighborship and tend to community individualism rather than neighborhood collectivism. Thus we are forced to the conclusion that as yet none of the influences which have built up neighborhood groups in older nations are at work here. We are justified in believing that inasmuch as American life is growing up with no feudal and mediæval background such influences will never come into existence. And a close study of European rural life leads to the conclusion that the older rural groups are not of the sort which we should desire if we could have them, picturesque as they are in literature; and that the superiority which the European farmer exhibits as compared with the American farmer in the matter of rural organization is owing, not to historic factors, but to developments which have sprung from conditions of the last decades of the nineteenth century, and from the early years of the twentieth. The Danish peasant is doing better than the American farmer in this respect, not because he is old fashioned, but because he is up to date. The splendid achievements of the Irish farmers in co-operation, and the enormous successes of the peasants of Italy, Germany, and France, in co-operative banking come from the new life and not from the old. Everywhere, the new

wine is being poured into new bottles, instead of the ancient vessels. The new movements in rural life spell democracy, not privilege.

Rural communities need to get together; but the American farmer is too much of a utilitarian to yield to the attraction of amusement for its own sake, or offered culture, or debates, or lectures. He is hard headed and rather cynical about new things. Companionship with his fellows may be needed, but the need is not fully confessed nor keenly felt. He is rather single-minded in his pursuit of profit in the material sense. Like all self-respecting people he objects to the process of being "uplifted" by people who take a position above him. If social centers are to succeed in the rural community, their success must come thru their ability to serve the farmer and the farmer's wife along the lines of thought and endeavor which appeal to him.

For these reasons the church does not seem able to furnish the nucleus of the rural social center save in rare instances. Here and there, the rural church is doing good work in building up again the lost sense of neighborship; but on the whole churches are losing ground in the country. One of the gravest problems which confronts the churches is the problem of the ebb-tide which is leaving stranded and abandoned churches on so many countrysides. Moreover, the church cannot do the whole work. Many people do not belong to any church. Those who do belong are divided among many denominations, which, if not warring on each other, are not co-operating, and are in no position to co-operate. The church cannot call in aid the powers of taxation, nor the assistance of the state. It may be *a* social center for the community, but it can never be, and should not be, *the* social center.

The neighborhood club and the co-operative organization are doing good work in places. Women's clubs have worked great changes in some rural neighborhoods. I know of some places where clubs of farmers' wives have kept up for many years successful meetings of a character very similar to the gatherings of people interested in literature, current events, and music in cities. Some of these communities are admirably served by these clubs. But on the whole I feel that there is less of this social activity than there was thirty years ago. The clubs are better, perhaps, than were the old spelling-schools and "literaries," but they are vastly fewer. The need for social centers everywhere, as a potent force in American life as universal as the practice of agriculture, has no hope in these. The communities that most need awakening are incapable of finding utility or amusement in these rather sophisticated and "highbrowish" affairs. Something more elemental and elementary, more useful and more profitable materially must appear.

Along with this demand for rural centers comes the admitted need for a new kind of rural school. The rural school of today is apt to be in the main a bad copy of a poor city school. It is not related to the country

life. It proceeds as if on the theory that farmers' sons should all become clerks or professional men engaged in urban employment and all country girls stenographers, shopgirls, factory employees, or the wives of such city-dwellers. This bias of the rural school against rural life is the one great scholastic blunder of this nation. It has acted as a powerful wind blowing the selfsame way with the baneful tide of allurement and economic pressure which has been for so many fateful years, and still is, emptying the farms into the cities.

Our eyes are becoming opened to the destruction which such schools work on our national life. The word has gone forth that the rural school must be ruralized. It must be correlated with rural life. It must open the eyes of the country children to the beauties of that field of nature in which the farmer acts with, and is reacted upon, by scientific truth. Our arithmetic must deal with the quantities of soil constituents, farm inventories, eggs, poultry, cow-testing, and generally with the computation of problems related to scientific agriculture. Every problem in mathematics must be a problem in scientific rural life. Our nature-studies must deal no more with the koodoo, the mongoose, the toucan, and the aard-vark, but rather with the cow, the hen, the hog, the horse, and the sheep. Our physiologies must abandon the useless anatomies and terminologies of yesterday, and become comparative. The physiology of the domestic animals must be considered with that of the human being to the end that we shall know our animals while knowing ourselves, and each the better for knowing the other; and our hygiene must take in the nutrition of these friends of the barnyard and pasture. Thus the rural school shall become a school of animal husbandry. Geography must so far include the study of soils that the child may know of the plant food in his father's farm, whether he knows the capital of his state or not. Reading and spelling must be related to the life of the farm. History must tell of the movements of agriculture, rather than of battles or political contests. Pupils will do their language work in reporting the results of experiments in farming, rather than in the diagramming of sentences or the parsing of words. And where such work in systematic grammar is done, the sentences chosen will be such as to possess a background in the real life of the pupils, rather than in mythology or the classics. The school will be completely ruralized.

And in this process the cultural efficiency of the schools will be increased tenfold, because the children will not only imbibe ideas, but will use them. The dreadful uselessness of most of our purely "cultural" studies lies in the feeling on the part of the child that the whole matter is in an unreal world of school and quite aside from the world of life. When the rural schools become real laboratories of farm life, when the boys and girls study in the schools the very things their parents are laboring with on the farm, the habit of thinking about things rather than about words will give vigor to every phase of thought. If I desired to produce a generation of poets,

artists, mathematicians, and statesmen, I would begin by giving to the minds of the young the real grain of scientific truth to grind, trusting to the insatiable hunger of the mind which grows by every morsel of truth consumed by it. I once saw in one of these new rural schools a boy sitting with a rack of agricultural bulletins at his elbow, writing on raspberry culture. I asked him why he chose that topic for his essay. "I'm growing raspberries for the market," said he. Language for this boy was a medium for expressing thought, rather than for getting marks. He was interested in the essay, but more in next year's crates of berries. Out of such conditions will come pupils who will make the language glow with meaning, as do Caesar's *Commentaries* and Grant's *Memoirs*—and for the identical reason that gives immortality to these works as literature. In each case the writer will have something to say.

Out of this new kind of country school, I believe, will grow the new kind of rural social center. Already the Babcock milk-tester, the weed cabinet, the trap nest, the experimental plat of grain, vegetable, or flower are to be seen in and about the rural school. Wherever these schools are correlated with rural life, the social center springs up in the school spontaneously. I am convinced that if it is to live and serve it must so spring up. A farmer in Page County, Iowa, was rather opposed to the new-fangled notion of teaching agriculture in the school. But after the milk of his cows had been tested in the school, as a part of its regular exercises, he changed his mind. For by this test he discovered that cows which he had thought as good as any were actually being kept at a loss. The simple classroom experiment in natural philosophy had made it possible for this family to live a fuller and happier life. The school reacted on the home, and the home felt it. To this man, the school became as much a part of his life as it had been of the life of his children. The correlated rural school thus becomes a continuation school for every man in the district. And for every woman, too. The girls who compete in the cooking and sewing contests bring their mothers into the work of the schoolroom inevitably. A link is established connecting every farm with every other farm, and binding them all together. A social center comes into being with or without meetings. But the meetings are inevitable, and with the fact of meetings come social relations, debates, lectures, moving-picture shows, and perhaps dances and games. The people meet because they have something to consult about, and not because some well-meaning person has said, "Go to, now—let us be social."

I am convinced that the school must furnish the nucleus of the rural social center of the future. It must do so by making its work a part of the farm work of the community. It must do so by an appeal to the economic sense of the people. It must do so by taking over and performing a great deal of work that can be done by the pupils to their great educational advantage, and to the financial benefit of the farmers. The schools are

equipped, or can equip themselves, to perform a great many such tasks. They may carry on cow-testing work for the upbuilding of dairy herds. They may work out balanced rations for the live stock and poultry of the neighborhood, in each case furnishing the farmer the instructions for mingling feeds, and telling what he should buy for the purpose of balancing the diet. For these things are a matter of investigation which any advanced class in a country school may do. They may keep records of the egg production of the various flocks, to the end that the best local strains may be known. They may record increases in weights of the different lots of animals being fed that the best rations and the best conditions and the best breeds may be recognized. They may analyze every lot of seed brought into the neighborhood, for foul seeds and for vitality. They may test the seed corn of the neighborhood, ear by ear, or if this seems impracticable, they may make and send out the cabinets for such testing at the homes. This work alone would add millions to the corn crop of any of our corn-growing states if it were universally carried out. They may test new vegetables and flowers. They may make garments for the homes. They may develop the art of cookery to the great satisfaction of the housewives. They may make war on flies and vermin. They may make the hookworm in our southern states a thing of the past. Some schools may do all of these things now, and any school may do some of them. And as soon as this work starts, the social center is well on the way to flourishing birth, whether it is intended or not.

There are other and higher tasks to which the rural schools may address themselves as they gather strength by contact with truth-tasks beyond the power of the ordinary farmer to perform. One of the greatest of these is the task of keeping the farm accounts. Many will be surprised at the statement that no satisfactory system of farm accounts of a statistical nature has as yet been worked out. So many agricultural economists are now at work on this matter, however, that we shall soon have, I doubt not, as good a cost system for the farm as we have for the factory. But it is certain that when the system is perfected it will be found too complex for the farmer to keep. A proper cost system for a farm is vastly more complex than the books of a bank. The farmer could not keep it if he knew how—it would take more time than he could give to it. But there seems to be no reason why the perfected rural school should not be able to keep the perfected accounts for the farm. It would constitute work of the highest educational value for the older pupils of the school. It would gradually accumulate a mass of facts as to the profits and losses in farming which would be of priceless value to economists now if accessible. It, in connection with the tasks I have mentioned, with soil analysis, and things generally which can be better done collectively than individually, will make the rural school the best business college in the world.

The rural school will thus become a farm laboratory and a domestic

science school. As a continuation school in which the grown people as well as the children are enrolled—in fact if not in form—it will command the constant attention, and attract the intensest interest of every patron. New buildings will be required, better grounds, and a stronger teaching force; but these will be eagerly furnished when, in addition to giving to the children and young people a broad and practical education, the school's work will have a great, a growing, and a measurable money value. Such a school will be merged in the general society of its community, and cease to be a thing apart. The life of the school and the life of the farm will be one.

Nobody who has seen the uplift which has come to a considerable number of our rural communities thru a correlation of rural school instruction with rural life can, I believe, condemn this picture as impossible. It is so far from being in the realm of the impossible as to be, in its beginnings, already in existence. Several of the states already require the teaching of agriculture and domestic economy in the rural schools. This teaching is in most schools very inadequate; but it is doing a great good even in its imperfections. The elements of agricultural science are not more difficult than are other studies which have been from time to time imposed upon our unprepared teaching force; and such is the grip of real truth related to actual life that this teaching possesses a gratifying vitality already. In several school systems rural life and rural sentiment have been profoundly affected by the timid beginnings of the new kind of rural school. I have in mind the conditions in Page County, Iowa, as best known to me personally. In Barnes County, North Dakota, the social center seems already in promising growth from the rural schools, and is assuming the very significant form of economic co-operation—that greatest need of rural life. In parts of the South the schools are taking hold on the eternal verities of Mother Earth in a wonderful way. And all over the nation the school activities in corn, tomatoes, flowers, live stock, sewing, cooking, sanitation, debating, entertainments, picnics, and all the needful factors of a full social life are manifold and increasing. The social center which I now here suggest will inevitably grow from these seeds, if the schools take up their true work—that of making themselves the social and economic laboratories of their communities.

The dream to me is a wonderful one. It means the ennobling of the rural teacher, and the magnifying of his functions and emoluments. It means the coming into its own of that long-contemned office, the county superintendency of schools. It means more money for schools, and money expended with actual financial profit to the community. It means that the school work shall be in large part economically productive work. It means a school system on which the people will spend their money with the same sense of good business judgment which they now feel in building barns. It means a longer school life for the farm boys and girls, for the

reason that their work will be necessary as well as educative. It means in every way a more contented, a more efficient, fuller rural life.

It will tend to arrest the drift of the rural population to the cities. An incident in proof of this, and I am done. Years ago in Wright County, Iowa, 157 boys and 174 girls in rural schools were asked their plans for life. All but seven of the boys, and all but eleven of the girls declared that they would have nothing to do with farming. During the next three years the teaching of agriculture and domestic science was introduced. Another vote was then taken in the same schools, with 174 boys and 178 girls voting. All but eleven of the boys and all but seventeen of the girls declared their intention of remaining on the farm.

This is a revolution in sentiment, and it means much. Once let these new schools complete their work of social regeneration and the drift will turn from the cities to the farm. We shall have opened to all eyes the attraction of rural life, as well as its material rewards; and out of the co-operative intercourse of the farmers of the nation will grow the new democracy which has been the dream of reformers and humanitarians.

TOPIC: THE PUBLIC SCHOOLS AND THE PUBLIC HEALTH

A. THE DUTY OF THE STATE IN THE MEDICAL INSPECTION OF SCHOOLS; RESULTS WHICH THE PUBLIC MAY RIGHTFULLY EXPECT

FLETCHER B. DRESSLAR, SPECIALIST IN SCHOOL HYGIENE,
BUREAU OF EDUCATION, WASHINGTON, D.C.

There are two main topics in the subject assigned me, viz., the right and duty of the state to institute medical inspection, and the results we have a right to expect from such inspection. I wish to discuss these two topics briefly and in the order named.

First: What right has the state to undertake medical inspection?

The state's vital interest is always the interest of the people; not the interest of the individual alone, but the interest of the individual living and working in harmony and co-operation with other individuals.

Questions of health and vitality are questions which concern the individual at every point. He can reach neither the measure of his own possible success, nor the acme of usefulness in society if hindered by disease or handicapped by a defective or enfeebled body. The health and vigor of each individual included in a social group directly or indirectly affect all.

The children must go to school; the laws compel the parents to send them. But how will you guard the child who comes from the clean home, and teach the child from the careless home, unless the school authorities know the conditions? Even to maintain the dignity of our public schools, to say nothing of the benefit to the children and society, it is incumbent

on us to make these schools both a worthy and a safe place for children to mingle with each other, to learn self-respect, love of justice, fair play, and those fundamental laws of health which are so often neglected.

It is the duty of the state to safeguard its own interests when localities within its borders neglect them. The health of a community is not of local interest merely, but directly and indirectly affects the general public weal. If a community in a state is inclined to pollute a stream of water which serves other communities, there is no longer any question of the right of the state to prevent this pollution. If a community thru ignorance or carelessness neglects the health of its children while in attendance on schools to which they are compelled to go, the state not only has the right, but is duty-bound to protect them as well as to help them. We have long since concluded that the state must, for the sake of its own progress and safety, educate all the children, and only seven states are now without some form of compulsory school attendance laws. We know that physical welfare and mental progress are inseparably related. Furthermore, we know that the public test of the value of any education lies in the added power of helpfulness thus created. The life's work of any individual—and I apply here the larger meaning to "life's work"—is measured by what he can do, and by what he is willing to do. I see no real meaning in all our educational striving save as it issues in better and larger service and influence. If an individual is handicapped thru physical defect or disease, he is thereby limited in his usefulness. If the state insists on proper mental development it has an equal right to insist on proper physical development. Indeed, an illiterate individual may be less serious as a menace to society than a diseased one who has had the ordinary schooling. If the state has the right to demand mental fitness, it has an equal right to demand physical fitness. If it has the right to prevent the contagion of ignorance, it has an equal right to prevent the contagion of disease and bodily neglect.

If medical inspection of school children is a useful means for conserving, protecting, and developing the health of our children, then it is unqualifiedly the right and duty of the state to foster and develop medical inspection. The chief asset of any state is physical stamina, guided by wholesome, moral ideals and broad-minded intellectual power.

Individual liberty is a fundamental conception in our government, but individual liberty is bound up with opportunity. That individual liberty which would limit itself is a spurious kind of liberty. Any individual who refuses to enlarge his field of freedom by limiting his personal opportunity is deliberately denying himself the highest type of freedom. If, therefore, it is clear that medical inspection of school children has aided in protecting children and society from disease and the baneful results of defective development, the right to medical inspection is clearly established. I am not afraid of that form of socialistic endeavor which helps all and harms none.

Granted now that the state has a right to look after matters pertaining to the health of school children, the next question to arise is this: Has medical inspection as now organized proved useful?

In order to determine with some degree of assurance whether such forms of medical inspection as we now have, have been useful in conserving the health and promoting the physical well-being of school children, it is necessary to set forth briefly some of the general results attained.

It has been demonstrated again and again, both in this country and in foreign lands, that careful inspection of school children has helped to prevent epidemics of contagious diseases. Many cities have gone little farther in medical inspection than to make this the chief aim of the work, and this service alone has been worth more than it costs. But since we have found out that even well children may be "carriers" of disease germs, it has become necessary to institute more careful examinations, even of well children, in order to remove such "carriers" from contact with other children more susceptible to disease. For example, Dr. Curtis Bland, in a recent report on an epidemic of diphtheria in the town of Greensburg, Ind., says:

> Out of a total of 872 cultures taken [from grade and high-school pupils, September 30–October 6, 1911] 288, or 33 per cent, came back positive. . . . . All parts of the town were found to be about equally infested with carriers.

Out of 400 "carriers" found in that town of 6,000 people, only 4 developed clinical symptoms of the disease. Plainly, under such conditions, the only way to break up an epidemic is to search out the "carriers" among the well people, isolate them, and treat them. He rightly concludes that to fight an epidemic of diphtheria the carriers must be discovered and isolated. To this we might add, if an epidemic of diphtheria is to be prevented, carriers must be found before they endanger others. This, adequate medical inspection would accomplish.

Medical inspection has served the purpose of exposing to us in a glaring way the fact that school conditions are responsible for the progressive development of many defects. A great mass of evidence has been collected showing conclusively that school conditions and school demands tend to develop myopia, scoliosis, anæmia, retardation in physical growth, and all the ills in its train.

I am well aware that statistics can be found that will prove or disprove almost everything, and that great caution is needed in arriving at sweeping conclusions. But when careful statistics and common-sense tally, as they do in these particulars, the conclusions expressed are warranted. Overcrowding, bad ventilation, unhygienic school desks, poor lighting, a superabundance of writing and book work, together with lack of freedom and opportunity for out-of-door games or wholesome physical exercise, have furnished unnatural conditions for normal development, and we have no right to expect better results until these conditions are ameliorated.

Medical inspection has made it possible to secure better attendance and fewer interruptions by reason of the consequent decrease in the amount of illness among the children. The work of the school nurse in conjunction with the health officer has done much to correct defects, interest the home in matters of sanitation, and greatly add to the school life of many children. Schools have been enabled to continue their work even in the presence of an epidemic of contagion, when thru careful inspection, carriers have been detected and isolated. Often, from this point alone, medical inspection has saved more than it cost.

Best of all, where medical inspection has been in the hands of wise and carefully trained men, and where it has been supervised and handled from an educational point of view, it has been an educational agent of great moment. It has served not only to correct faulty school conditions and practices, but likewise to correct unhygienic and unwholesome home conditions. Especially is this true where, thru the agency of school nurses, the most effective follow-up work has been done. It has helped to clean up the home, to stimulate parents to give more attention to the food, the clothing, sleeping-rooms, and general home sanitation. This phase of the work is just beginning, but its future development will be a powerful agency in home sanitation.

There has been a marvelous increase in the last five years in the number of cities undertaking medical inspection. In many places enthusiasm has outrun good judgment, or at least the work has been undertaken with little understanding of its true purposes, and doctors with no sort of adequate training have been selected to do the work. Perhaps no title has had so much power over the people as the title of doctor.

It will do comparatively little good to examine hastily thousands of children and tabulate the defects in impressive columns unless intelligent steps are taken to prevent such defects, and to correct those already found. And here lies the chief weakness of the work in this country. The findings of untrained and overzealous inspectors are criticized by family physicians who are jealous of what they consider their rights. Opinions clash, and professional jealousy always runs high, especially where scant knowledge is involved, or where financial interests are at stake. Because of these difficulties, Dr. Cabot, of Massachusetts, has claimed that better results in small towns are obtained by the use of trained nurses alone than have been obtained in large cities where doctors of medicine have been selected to examine the children.

But in many cities there is developing a broad-minded and intelligent policy regarding the purposes of medical inspection. By the courtesy of Dr. Gallivan, the Chief of the Division of Child Hygiene of the Boston Board of Health, I am able to present the following from a report of the work for the five months ending February 1 of the present year:

Medical inspection of schools begins at the kindergarten class and ends with the high schools. Of equal importance are the three objects which medical inspection has in view:

1. The detection of communicable diseases and the exclusion from school of every pupil so afflicted.

2. The protection of every pupil in the schools from contagion unrecognized by parent or teacher.

3. The detection of such defects which, if untreated, would result in permanent injury to the pupil.

For the work of school inspection in Boston, 82 physicians are employed under the direction of the Board of Health. These physicians visit both the public and parochial schools daily. During the five months mentioned, in addition to general inspection, physical examinations were made of 82,224 of the 123,091 children then in school. Of those examined, they found 28,721 free from defect, while 53,503 were found defective, many in more than one way.

The school committee employs nurses to follow out as far as possible the directions of the school inspections. These nurses visit the homes, consult with parents concerning the treatment the children should have, and, if need be, accompany them to physicians, hospitals, or clinics.

But the work of the Division of Hygiene goes much farther: "It is concerned with the physical welfare of every child in Boston from the time of conception up to the age of sixteen years." The work of the division is classified into three subdivisions as follows:

1. Prenatal and postnatal work.
2. Medical inspection of schools.
3. Physical examination of licensed minors.

I have no time to go into further details but it is evident that here we have a clearly conceived duty regarding the health of the community, far wider than mere medical inspection. Many other cities in the country have, in no uncertain terms, recognized the same duty to the children as well as to the general welfare, and there is no doubt of the fact that we are in the beginning of a comprehensive movement for conserving the physical stamina and preserving the health of our people. But we have scarcely begun. As usual, with all beginnings for better things, we are now chiefly engaged in locking barn doors after the horses have been stolen.

We now come to the second main topic: What results may the public rightfully expect of medical inspection of school children?

The public has a right to expect from medical inspection largely what it intelligently demands of it, and according to the sort of support it has given to it. If the public does not know what medical inspection involves in the way of skill, organization, and support, it is likely to get corresponding haphazard results. Some cities are getting excellent results, some are accomplishing comparatively little; simply because some insist on real

inspection and examinations by qualified inspectors, while others leave things to chance, and the right chance rarely comes.

Before the state can expect the best results, it must insist that those who go into the schools to look after the health and normal development of children must be appointed to do this by reason of special fitness. Generally speaking, this has not been the prevailing practice in America, and of course medical inspection has not done its full service under such conditions. Professional jealousy and personal politics have played conspicuous parts in appointments.

We are in need of more health inspectors, those knowing more about education, more about the normal growth and development of children, and especially more about physical education and general hygiene. Our best medical schools ought to offer courses preparatory to this work. We need more doctors of public health than mere doctors of medicine. Meanwhile, before we can get them, the public must be educated to ask for them and to pay for their services when secured; and the better fitted the health inspector the better to make his payment, with absolutely no place in the scheme of things for the political man or the man not consecrated to the work.

The term medical inspection is an unfortunate one for designating what ought to be the chief work of the health officer for schools. School children would need little medicine and less medical advice if we had more sanitarians and doctors of public health to teach them and their parents how to be clean and how to care for their health in every way.

Our system of paying doctors to do something for us when we get sick ought to be largely discarded for the Chinese system of paying them to keep us from getting sick. Our medical inspectors are now on the hunt for defects, and they sometimes get so enamored with beautiful cases of disease that they cannot passionately love a case of perfect health and perfect development. The normal with many of them is the abnormal. In proof of this statement, I wish to call attention to the great variations in reports from medical inspectors in different parts of the country, in the same cities and regarding the same children.

In New York City, for example, it was found that two inspectors examining comparable children in the same school reported results differing by 100 per cent. It was also found that some inspectors found few instances of many defects, while others found many instances of practically every defect listed.

It has become clearly evident, to those who are critically examining into the results of medical inspection, that men and women who undertake to supervise the health department of schools must have special training for this work. Neither the narrow specialist nor the general practitioner is necessarily competent to do this work in a satisfactory manner.

The most significant, ultimate good of medical inspection, I believe,

will arise from the increased knowledge by the people as a whole concerning the personal care of health. Great numbers of our people are yet in gross ignorance and superstition concerning matters of health and disease. Obituaries are printed in the newspapers of all parts of our country, reading much as follows: It has pleased an all-wise and Divine Providence to take from our midst a youth of great promise, etc. By reading a little farther you will see that that Divine Providence was a case of typhoid fever, a disease induced by filth. Such obituaries are not only criminally false, they are ungodly, impious, and wicked. They should state that by reason of carelessness, ignorance, and filth, a promising life has been sacrificed, to the great displeasure of an all-wise Deity.

There are thousands of people in this country who will not see that vaccination does and will prevent smallpox. They are willing to set all sorts of personal theories and motives against the facts. They do not really know the difference between proof and belief. There are great numbers of intelligent people who have no useful conception of the relation of bacteria to diseases. They are ready indeed to assert vigorously that all this talk about germs is just a fad. It does no good simply to decry these conditions. The people must be educated more systematically, persistently, and purposefully in sanitary matters.

Our chief duty lies in removing the causes which contribute to physical unsoundness and disease. As long as we herd our children in schools where they must breathe impure air, bend over insanitary school desks, work at books when they need physical exercise, just so long shall we be paying for our own errors. Medical inspection will not and cannot save the children of our great cities from degeneration and disease, unless thru this agency we are led to see more clearly the results of unhygienic living.

If medical inspection can make clear our defects and at the same time teach the people the absolute requisites of wholesome living, then a new education will actually begin.

I maintain, therefore, that the chief objects of so-called medical inspection must include the following points:

1. It ought to serve as an efficient means of preventing the spread of contagious diseases, particularly those to which school children are peculiarly susceptible. This will necessitate a careful examination of all children, especially at the beginning of the school terms, in order to exclude both children who are suffering from contagious or parasitic diseases, and those "carriers" who are a menace to others, even tho they themselves show no decided effects of the diseases they are capable of disseminating.

2. Medical inspection ought to emphasize in a decided way the especial significance of hygienic conditions in schools. It seems more than foolish to shut up our well children in unventilated and improperly lighted schoolrooms, furnish them no playgrounds, compel them to live a life not in accord with the laws of physical development, and then when they become

anæmic, nearsighted, and defective, make a great stir about special classes for defectives, and spend in building special schools money better spent in keeping children well. We must learn that it is far more important to furnish conditions which promote the health and development of well children than it is to make special efforts to care for those who are sick or defective, especially where these defects have been largely induced thru our neglect.

3. Health officers must know more about education; more about the hygiene of teaching; more about the normal demands of child-life; must possess more ability to work with teachers and the people for the general welfare of the community. A large majority of physicians, those who would not hesitate to undertake the work of supervising the health interests centered in our public schools, are wholly unfit for the place because they know next to nothing of the ideals and methods of modern education, and they are ignorant of their ignorance. The best results cannot obtain under such conditions.

4. We need health officers whose chief delight is in finding and developing beautiful cases of physical perfection rather than in finding some obscure and rare disease.

We need doctors of health who will be more delighted in exhibiting a large list of healthy, well-developed children than a long list of those who are physically defective and diseased. To be sure, they must be able to see defects and diagnose correctly, but their chief emphasis should be in preventive measures. School men are pretty thoroly tired of the mere finding of defects; they need more help in preventing them.

We need health officers who embody a combination of the Athenian worship of physical perfection, the enthusiasm and skill of the modern bacteriologist, and the spirit of the teacher whose face is turned toward better things. We need health officers whose philosophy is based on the gospel of physical vigor, on the sanctity of personal purity, and on the godliness of clean living.

B. THE TEACHING OF PERSONAL HYGIENE IN THE SCHOOLS

DAVID STARR JORDAN, PRESIDENT OF LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

The teaching of hygiene in the schools demands imperatively two things: first, that the teacher should know thoroly what he is talking about; and second, that he should know how to join his ideas effectively to those the children already have. As hygiene is applied physiology, and as physiology rests on biology and chemistry, instruction in hygiene cannot be effective if the teacher does not possess the knowledge on which it rests.

In the teaching of the hygiene of sex, the most difficult of all biological

problems, and the most beset with embarrassments to the teacher, the end in view is to make certain elementary ideas the common property of all intelligent people, to make them, like the knowledge of gravitation or of the multiplication table, a matter of course, to be used unconsciously as a basis for conduct.

So long as information of this kind is forbidden knowledge, or knowledge to be obtained on the sly, so long will the danger of sex-perversion exist. Other dangers arise when this kind of instruction has undue attention called to it. The teacher cannot speak effectively on these matters without full and accurate knowledge. Too much study on these topics is dangerous to the sanity of the teacher. They should constitute not the whole but a proportional part of his biological studies. Besides the teacher's difficulties with himself, there is with the children a constant risk of rousing curiosities that should lie dormant. More young men are led into evil thru sheer curiosity than thru any form of inborn weakness or perversity.

But knowledge of this sort sooner or later will come to the child and the purer the channel, the better for the child's welfare.

Instruction in sex hygiene must include about four elements. These should be introduced, each in its turn according to the best judgment of the teacher, the last of them not much below the middle of the high-school course. These four are: (1) the meaning of parenthood in plants and animals; (2) the evils of sex perversion; (3) the existence of the "red plague" of parasitic organisms; and (4) the need of social sanitation. All these should be taught as simple facts, without hysterical emphasis. The processes of generation, the union of the pollen or male germ cells bearing hereditary material of the one plant, with the static ovule or female germ cell of the same or another plant, can be explained and illustrated. The sexes share alike in the impulse of heredity, the male germ cells are movable, the female sessile, because where they are the new plant must grow up. The function of cell-union is to bring variety. As each individual "takes after" or follows the qualities of both parents, it can never be the slavish copy of either. Something can be taught of the cell-nucleus, its chromosomes and their relation as probable bearers from generation to generation of unit characters. It can be shown that each individual represents a "mosaic" of characters of parents and of earlier ancestors. It can be shown also that certain traits may be recessive or hidden in one generation and dominant or evident in the next.

The general facts of heredity are the same in plants and animals, in man as in the lower forms. The details of the reproductive process vary with the mode of life of the different types of organism.

The question of self-restraint and of social morals must find its place somewhere. The "double standard of morality" can exist only among people who have no real standards of conduct. Laxity of life destroys ideals, destroys courage, destroys the possibility of real love and real happiness.

Immorality has its own punishments and these lie mostly in the loss of self-respect and in the loss of those rewards which make life worth living.

But over and beyond these, physical contact of any kind with immoral people has its own dangers. The possibility of infection with the parasitic organisms which cause the "red plague" exists always in such association. The "red plague" is not the penalty of vice, nor is it a result of excess. It is an ever-present danger into which every person leading a loose life even for a single hour is almost certain to fall and which causes misery and death to thousands of innocent people. These diseases differ from other infectious diseases mainly in this, that the organisms which cause them are slow-maturing, and that a person may be a dangerous source of infection while apparently entirely well and able to attend to the ordinary affairs of life. A victim of yellow fever, smallpox, diphtheria, or bubonic plague must take to his bed. These diseases run their course rapidly. Sometimes a victim of typhoid fever may not appear to be ill. Such people become the dangerous "typhoid-carriers," who bring death to others thru organisms which give little inconvenience to themselves.

The disease caused by the plant "gonococcus" has been known for ages. It does not always cause disability but it is very hard to exterminate. No one once infected is ever sure that he has been cured. This disease is a potent cause of surgical operations in women. Its infection in the eyes of children at birth is the most frequent cause of blindness. The evils it causes are innumerable, the more so because those infected are likely to treat it as a joke, and in course of time every prostitute, man or woman, becomes infected. It is therefore the certain result of immoral life, tho in no sense a result or penalty of immorality. To visit a house of ill fame is to plunge into infection.

More subtle and more immediately destructive is the animal organism known as "Spirochæte." This minute creature devours the walls of the capillaries. When it attacks the brain, it produces softening of the tissues which shows itself in hopeless insanity. In Ibsen's play *Ghosts*, Oswald describes himself as *vermoulu*, worm eaten thruout thru the presence of organisms derived from his father. The disease is not hereditary. No disease is hereditary, only the tendency to disorder, but in this case the living Spirochæte may pass from father to mother and in the nourishing blood from mother to child. The movement of armies has spread the disease over the whole world. In the cities of the tropics, it is especially widely diffused and it may be transmitted by means of towels, drinking-cups, and in many other ways. The idle rich and the idle poor are especially subject to it.

As a sanitary measure, it is one of the first duties of civilization to stamp it out. This can be done only by the suppression of its means of continuance. The social evil, the red-light districts in our cities, serve as the breeding-nests of these organisms. The white-slave traffic, an outgrowth

of supposed necessities of the standing armies of Europe, is essential to keeping up these districts, and it must be suppressed. The cost of a month's expense of the United States government for smokeless powder ($9,500 per day) would suffice for this extermination. To this end the American Vigilance Association is pledged.

Segregation of evil only serves to legalize it, never to diminish it. And these evils are no more necessary to society than are arson, burglary, and murder, which society consistently fights, altho it has never succeeded in suppressing them. The great count against the saloon is that everywhere in all countries, with but few exceptions, it is an open door to the brothel. Sober men, and for that matter drunken men, rarely visit the houses of evil. Exhilarated curiosity brings the ruin of thousands and the statistics of one of our military posts show that the road to ruin is made easy by beer.

To teach these matters quietly, judiciously, accurately, and intelligently, each in its turn, and without exaggeration and without hysteria, is the work of the wise and discriminating teacher. It is not best to force them on the schools before the teachers which can do this are found.

C. SANITARY EDUCATION IN RURAL COMMUNITIES

CHARLES E. NORTH, M.D., NEW YORK, N.Y.

The work of sanitation.—The work of sanitation is to prevent the transference of infection from one individual to another individual. There is much mystery in the popular mind as to the meaning of the term "infection"; the words "bacteria" and "germs" have come into popular use, but convey only vague ideas to many of us. It is common knowledge that the living things about us can be divided into the plant kingdom and the animal kingdom. Scientists have decided that bacteria belong to the plant kingdom.

As one walks out into the fields and views the trees, the flowers, and the grass, these things do not arouse any alarm. The vegetables in the garden and the flowers growing in the ground are looked upon as entirely harmless, and many of them as most useful to mankind. It is true, however, that here and there a very few may be poisonous. The poison ivy, some few mushrooms, one species of sumac, and possibly a very few other plants are known to be poisonous, but these poisonous plants are very few and very rare. It is remarkable also what a great difference there is in the size of plants. Some of the giant trees are the largest. From these we can descend by degrees to the mosses and to the molds, which we now know are tiny plants. The microscope reveals a new plant world. The mosses and molds immediately become giants, and thru the microscope we see numerous smaller plants. The smallest of all are the bacteria. Some of these are so tiny that thru the most powerful microscope they appear only as a minute

speck or dot. There are hundreds and perhaps thousands of varieties of them. Among these, just as among the large plants of which we have spoken, there are very few which are poisonous. Thus tuberculosis and typhoid and diphtheria are each caused by a small poisonous plant. The other diseases called infectious diseases are caused by other varieties, but the great majority of these bacteria are entirely harmless and some of them, in fact, seem quite useful and necessary to the welfare of human beings.

The giant trees are historically among the youngest of plants. The most ancient of all, the scientists tell us, are the bacteria. They are the ancestors of all other forms of vegetable life, and the numerous plants and trees which we now see are the direct descendants of ancient bacteria. Before animals were created, there was no tuberculosis or typhoid or diphtheria, but after the animals and men appeared, some of these tiny plants accidentally took up their residence in the noses and throats and intestines of men. It was a startling event when these tiny plants learned how to live and grow inside of animals. When they did so, infectious diseases first began.

At the present time there are many men, women, and little children in whom these plants have taken up their residence. In fact, having once learned how to grow in animals, many of them have entirely lost their power of growing anywhere else, and cannot live at all without the warmth and nourishment which they receive in living persons.

Tuberculosis is caused by the tubercle bacillus, a tiny plant which centuries ago took up its residence in human beings and animals, and has become acclimated so that now it can be grown only with the greatest difficulty outside of the body, and only when the body conditions have been imitated in the laboratory. Out of doors this plant will not grow at all, but soon dies. The same thing is true of the typhoid bacillus, of the diphtheria bacillus, and of the other kinds of bacteria causing our infectious diseases. They will live when in men and animals, and under special laboratory conditions, but soon die when exposed to out-of-door conditions.

Certain human beings are inhabited by these plants. Some animals are inhabited by them. Their existence is continued from generation to generation only because certain men and animals in whom they live pass them on to other men and other animals by a transference which is direct or indirect from those who are inhabited to those who are not. Thus we have with us people who are carriers of the tubercle bacillus, and people who are carriers of the typhoid bacillus, and people who are carriers of diphtheria bacillus, both children and adults, and these persons thru ignorance and carelessness transfer the bacteria which they are carrying to others who have been free from them, and in this way the infectious diseases are transferred from year to year and from generation to generation.

The practicing sanitarian has numerous illustrations of this fact. In

one of my own recent investigations I was called to the Adirondack Mountains to inquire into the cause of an outbreak of typhoid fever in a summer colony patronized by some of the wealthiest people of New York City. During two months, twenty-seven cases of typhoid fever had broken out in the camp. The cause was mysterious. All ordinary sources of the disease were investigated without result. It was only after six weeks of study that the discovery was made that one of the guides employed at the camp was the carrier of typhoid bacteria. This man was over seventy years of age and appeared to be in perfect health. He had no recollection of ever having typhoid fever, yet his system was so badly infected with these plants that he was discharging them in enormous numbers every day. He was the undoubted cause of not only twenty-seven cases and three deaths which had occurred in the last outbreak, but of eight cases which had occurred at the same camp in previous years. It is assumed that there are now 18,000 persons in the United States, apparently in perfect condition physically, who carry typhoid bacteria in their bodies and who are the cause of the annual outbreaks of typhoid fever from which this country suffers.

It is an old superstition that some houses are haunted with tuberculosis. It has been said that in country districts members of some families who have lived in the same house for generations have tuberculosis while people in other families are free from the disease. We now know that it is not the house itself which must be feared, but the people who live in it. While it is true that the bacteria of tuberculosis may remain alive for a time after they are discharged onto the ground or onto the floor of a house, yet their life is comparatively short, and they are soon killed by sunlight, and by external conditions. Bacteria are to be feared most in a fresh condition, and when the transfer takes place from person to person, it is, as a rule, by direct contact or by contact with something which has very recently received infection. In the case of tuberculosis, the use of spoons, drinking-cups, and handkerchiefs is a common means of transfer, or the direct breathing of air which has been recently polluted by the coughing or sneezing of infected persons. In a similar direct manner the transference of other infectious diseases takes place.

The work of sanitation consists in preventing this transference. Sanitation aims to protect the child and the adult who are free from infectious diseases against the transfer of bacteria from the children and the adults who are carriers of these bacteria. Sanitary science has made a study of all of the channels, both direct and indirect, thru which these transfers take place, and the best means for their prevention.

Conditions in rural communities.—Sixty-six per cent of the population of the United States live in rural communities, and 34 per cent live in large cities. There are about 1,500,000 people who die each year in the United States, and 3,000,000 who are sick and who do not die. Each year in the

United States 630,000 people die from infectious diseases. This literally means that this number of persons are poisoned to death by the growth of these small plants called bacteria. The deaths would not have occurred if these bacteria had not taken up their residence in these people. The death-rate in rural districts is slightly less than the death-rate in cities. Thus in country districts out of each 100,000 persons there are 1,400 who die each year, while in cities out of an equal number there are 1,650. Out of a rural population of about 60,000,000, there are annually killed about 400,000 persons from infectious diseases.

Theoretically life in the country is more natural and healthful than city life—air is better; food is fresher; there is less noise and smaller tax on the nervous system, and other conditions which warrant the statement that country life is healthier. Man is, in fact, an outdoor animal, and city life in a broad sense is artificial life, but the dwellers in rural districts do not obtain the full benefits of their natural surroundings, thru their own ignorance and carelessness. Studies of the water supplies of farms both in Canada and in the United States show that 60 per cent of the wells are polluted with house and barnyard drainage. The milk supplies while fresh too often have their source in tuberculous cows and are produced under unsanitary conditions. Disposal of human and animal waste products is commonly primitive, and these are, as a rule, exposed to flies in a manner that makes the transference of bacteria to the house and to the food easy. Sleeping with closed windows is common, so that house air in the country is often worse than house air in the city. Cellars are damp and improperly drained. The common drinking-cup or dipper is a regular institution, as is also the roller towel. Hot water is scarce, and consequently the dish-washing process suffers. As a consequence of these things even in the country there is an abundance of infectious diseases.

In rural districts in each 100,000 inhabitants, bacteria of tuberculosis kill each year 136; bacteria of intestinal inflammations, including infant diarrhea, and all other forms of intestinal diseases, excepting typhoid, kill 97; bacteria causing bronchitis and influenza kill 90; bacteria of pneumonia 83; typhoid bacillus kills 24; and diphtheria bacillus kills 17; bacteria of whooping-cough kill 12; bacteria of scarlet fever (undiscovered) kill 8; bacteria of measles (undiscovered) kill 8; and there are some other infectious diseases of lesser importance.

The conditions in rural communities differ from those in cities most markedly in one respect. The concentration of dwellings and of people in cities has compelled attention to public health matters, so that money and organizations are employed and rules and regulations enforced which have as their object the protection of the inhabitants against transference of infection thru water, milk, waste products, etc. On the other hand, in country districts the population is so scattered that there is less community of interest. In agricultural districts each farm is almost an independent

social unit, and has its own water supply, milk supply, and sewerage system. Its sanitary conditions are whatever the proprietor chooses to make them. Public health supervision over sanitary matters is, at best, but slight, and in the greater part of the country is entirely lacking. Rural districts do not lend themselves to the influence of public health authorities as urban conditions do, and consequently there has been a much greater reduction in the death-rate in our cities during the past few decades than in our rural communities. It seems obvious that since the most prominent characteristic of rural life is the independent position of the farmer, more is to be hoped for by direct appeal to his own intelligence than by official supervision. In other words, the key to the improvement of sanitary conditions in the country lies in public education.

The country school-teacher as a public health educator.—The intellectual authority as well as the social leader in rural districts is the country school-teacher. As a class there is no element of rural society in a position to wield greater influence in matters which pertain to social welfare. The movement toward better conditions of life has been carried to such a point that it has penetrated the educational systems in our cities, and is rapidly gaining an important place in public-school work. Beginning with personal hygiene and medical inspection, public health work in city schools will soon reach a point where the art of clean living will be taught; a child will learn the value of self-care in the matter of contracting infectious diseases. In rural schools, however, the movement has not gathered such headway. The teaching of physiology in the village school may satisfy the curiosity of children as to their internal organs, but does not in any way protect them against bovine tuberculosis from contaminated milk, or against typhoid from impure water. The rising generation has a right to be instructed in the first principles of sanitary science. This knowledge is even more important than the knowledge of physiology.

It might seem at first thought that the subject of public health is too difficult to be taught in the district school, but there is no subject that lends itself so readily to popular interest and to the interest of children. Such a simple matter as the washing of the hands may be made a matter of the greatest interest when studied from the standpoint of bacteria. A demonstration of bacteria by the use of glass plates and simple culture media is extremely simple and something that arouses the greatest interest in youthful minds. The microscope is always an instrument which arouses curiosity and which can be used to illustrate many sanitary lessons. Personal cleanliness, purity of food and of drinks, and a knowledge of the nature of disease and the methods of transference are all things which can be expressed in the simplest terms and made clear to the understanding of children. The subject of water, its pollution and its protection, can easily be made plain. Milk, its value as a food, highly appreciated by bacteria, and therefore the necessity of protecting it against them, is not too difficult a subject for

the child to understand. The cold in the head and sore throat caused by the growth of bacteria on the surface of the mucous membranes, and the danger to others of these bacteria when discharged in coughing and sneezing can be explained in simple terms.

But such work as this demands preliminary training. If the country school-teacher is to be armed with the knowledge of sanitary science, she must find this in the normal school and teachers' college. Our normal schools and teachers' colleges should have regular courses in public health work. We are dealing here, not with a merely academic subject, but something vital in importance, something which means the lengthening of life and the reduction of the death-rate to the people among whom the teacher is to practice her profession.

As a movement, the interest in public health matters has gathered tremendous force in the last ten years. In the majority of our cities it is now thought necessary to appoint a man to the position of public health officer who knows something of medicine and of sanitation. Three of our great universities have come forward and offer degrees for those specializing in public health work. Philanthropists, social workers, and engineers have already undertaken extensive enterprises in this field of work. Among educators, however, but little has been done.

The National Education Association in public health work.—The time seems ripe for public health work to be taken up as an educational matter. I hope I am not exceeding my privileges in suggesting that it is a matter worthy of a place in the progressive program of work of the National Education Association. A standing committee for the promotion of public health education as part of the organization of the National Education Association would give great impetus to the institution of courses in public health in our school systems. Such a committee could encourage the establishment of training-courses for teachers in the normal schools and teachers' colleges. It could encourage the publication of textbooks for the various grades of work, and the institution of laboratories in our public schools for the demonstration of the principles of sanitary science. It could arrange for systematic popular lecture-courses on matters of public health.

Results.—The possibilities of such work are not vague, but have actually been set down in figures by students of vital statistics. In the report of the National Conservation Commission printed by the Committee of One Hundred, it is stated that the average length of life of the inhabitants of the United States is now 45 years. (One hundred years ago the average length of life in Europe was less than one-half of this.) It is estimated that if sanitation were enforced the span of life would be prolonged by about 15 years, so that the average length of life would be 60 years. Seventy-five per cent of deaths from tuberculosis, 45 per cent of those from lobar pneumonia, 50 per cent of those from broncho-pneumonia, 85 per cent of those from typhoid fever, 60 per cent of deaths from infantile diarrhea, and

70 per cent of deaths from meningitis would be prevented simply by insistence by the public on pure milk and pure water and pure air. In rural communities in the United States 400,000 people each year die, and in addition to these about 2,000,000 persons annually are seriously ill, from infectious diseases. Even if only one-half of these deaths and cases of sickness can be prevented by education, it means that an immense field of useful work lies at the hand of the country school-teacher who will become a public health educator and will instruct the children and the mothers and fathers how to prevent the transference of poisonous bacteria from those who carry them to those who do not.

D. THE MEDICAL INSPECTION OF SCHOOLS AND MEDICAL FREEDOM

CHARLES A. L. REED, M.D., PROFESSOR IN THE UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO

A proper discussion and a proper understanding of the theme that has been assigned to me must begin with a proper understanding of its constituent terms. In other words what are we to understand by "the school," by "medical inspection," and by "medical freedom"?

The school is an instrumentality that has been evolved by society for the better development of human efficiency. It began with a group of children collected together for the purpose of acquiring the elements of learning; it has become an aggregation of children gathered together, not alone to acquire smatterings of concrete knowledge, not for the improvement of their own minds alone, but for the physical, mental, and moral betterment of the race. I may add that another purpose has crept into the school, in some instances has come to dominate it, and that purpose is the development of individual aptitudes to meet the special practical purposes of life. If, now, we contemplate the school from the viewpoint of any or all of these attributes, we shall find that our definition is correct and that no narrower conception is justified by the school as it exists in the United States today.

If, now, we accept the schools as one of the agencies that society in the exercise of its own rights has established for the development of its own efficiency, we must concede that society has not only the co-ordinate right to protect that agency against deleterious influences, but the equally co-ordinate right still farther to promote its effectiveness. We may go even a step farther, and state that society, as the creator and maintainer of the school, has the unquestioned right to protect itself against any deleterious influence, physical, mental, or moral, that may originate in, or be disseminated by or thru, the school. The significance of these self-evident principles is to be found in the fact that the school, as it exists in the United

States, today represents a grand aggregate of something like twenty-one millions of youths of both sexes and various ages. It is segregated into groups of from a dozen to a dozen hundred or more, scattered absolutely all over our land. These constituent groups assemble on a probable average of two hundred different days every year. The individuals that make up these groups come from every conceivable avenue of life. There is none of the various influences that can modify human existence to which various members of this group are not subject. Within limitations, each may influence all and all may influence each, and individuals may in turn influence the homes from which they come. In no particular is this more true than with respect to contagious and infectious diseases. In the years gone by, this fact was recognized in a more or less empirical way; since the establishment of the germ causation of disease, it has passed into the realm of axiomatic truth. Tuberculosis, smallpox, diphtheria, scarlet fever, measles, and whooping-cough are among the more familiar examples of diseases susceptible of communication thru the school. More than 500,000 die from epidemic diseases, including tuberculosis, every year in the United States. That means the death of one person every minute, or an annual aggregate equal twice over to both the army and the navy of the United States. The economic loss in the per capita valuation of human life amounts to more than one billion dollars every year—more than enough to defray all the expenses of all the departments of the United States government.

The economic loss from wasted time and dissipated potentiality defies computation. The influence of defective hygiene, personal and architectural, not only in propagating these diseases, but in developing new or aggravating old physical defects, vast and disastrous as it is known to be, cannot be determined without data which have never yet been reduced to record. The no less disastrous results of tasks, mental and physical, imposed upon pupils without reference to their individual physiological limitations, while not susceptible of expression in definite terms, are known to be appalling. The possible further adaptation of school methods to the even greater physical and mental development of the pupil is recognized by every progressive educator and only awaits the co-operation of the teacher and the physician to become an accomplished fact.

It will thus be seen that the school made up of about a quarter of our great population has great inherent possibilities for evil as well as for good, and that the duty of society is to safeguard and promote it as one of the chief means for the development of human efficiency.

It will be seen from this survey of the school that the problems involved in protecting it from deleterious influences and in still further developing its beneficent possibilities are primarily and fundamentally those that relate to the health of the pupil. The proper conservation of this greatest national resource, the health of the rising generation, involves an intimate

technical and professional knowledge of anatomy, physiology, hygiene, the causes and prevention of disease, and the art to determine and define the physiological limitation of the individual pupil.

It is the practical application of this knowledge to the protection of the pupil and the school, each against the other, that comprises what has come to be designated as the medical inspection of schools. It is not a new idea. Its germination goes back to 1833, when France, by decree, inaugurated the hygienic control of schools. In the seventies, the full modern idea was exemplified in Belgium. Leading German cities followed. Then came Great Britain. Hungary, Austria, Norway, Sweden, Switzerland, Roumania, Russia, Egypt, Chile, the Argentine Republic, and Japan have medical inspection of schools. In the majority of these countries such inspection is national in scope; in others it is restricted to certain states and cities.

In the United States the practice began in Boston in 1894. It has since spread to all the larger cities. In several states the provision is state wide, and applies to rural as well as urban schools. It should be shouted from the housetops that, of the two classes of schools, those in rural districts need the protection derivable from medical inspection more than do those of the cities.

As practiced in the United States today, medical inspection of schools is variously under the direction of either the boards of health or the boards of education, or both acting together. The executive body appoints the requisite number of medical men to act as inspectors. In Cincinnati these physicians are appointed by the board of health, from a list of eligibles furnished after examinations conducted under the direction of the municipal Civil Service Commission. These examinations are open to any physician of any "school," or of no "school" at all. The duties of the physicians thus appointed, so far as the schools are concerned, are to study the hygiene of buildings, more particularly as to heat, light, ventilation, furniture, water supply, drainage, and facilities for recreation; to examine pupils referred by teachers as suspected of having such contagious and infectious diseases as tuberculosis, smallpox, scarlet fever, measles, whooping-cough, and trachoma, or who are supposed to have vermin, or to be afflicted with bodily defects or deformities; displacements either of bones or viscera, or growths such as adenoids; or defective vision, or bad hearing. In the case of contagious and infectious diseases, the child is sent home for the protection of the other children in the school; in other instances, it may be sent home for its own protection. In either event, an explanatory note is sent with the child, accompanied by the suggestion that the case be at once brought to the attention of the family physician. The family, of course, have perfect freedom to choose any physician of any "school," or of no "school" at all. The inspectors never treat cases, as they are not permitted to engage in private practice. In this way parents are given

absolute freedom to choose their own physician or no physician at all as they may deem fit. The medical inspector simply sees to it that the child is in safe condition before it is permitted to re-enter the school. Children are likewise examined with reference to their adaptability to certain tasks, and to various forms of physical training. In this way the pupil is individualized, and his aptitudes are determined. And in this way is formed a policy that, in the language of the English Board of Education, "is founded on a recognition of the close connection that exists between the physical and mental condition of the children and the whole process of education. It recognizes the importance of satisfactory environment, physical and educational, and by bringing into prominence the effect of environment upon the personality of the individual child, seeks to secure ultimately for every child, normal or defective, conditions of life compatible with that full and effective development of its organic functions, its special senses, and its mental powers, which constitute a true education."

It is evident from a brief survey of the functions here enumerated, that they must be exercised by persons of adequate technical knowledge represented only by the medical profession. It is furthermore evident that the exercise of these functions is of greatest importance in order of occurrence, first, to the individual pupil; next, to the other pupils of the school; next, to the family of the individual pupil; and finally to the community at large, and to the race.

In a selfish sense, the medical inspection of schools is of the least possible value to the medical profession. As a matter of fact, that profession, thru its own activity in the prevention of disease during the last twenty-five years, has deprived itself of nearly 40 per cent of its previous employment. I am proud to proclaim that its efforts to prevent disease were never so effective or so enthusiastic as they are today. And I have no hesitancy in stating that no line of its altruistic efforts offers greater substantial reward to society and less substantial reward to the medical profession itself, than does the medical inspection of schools. So evident is this truth, and so beneficent is that truth in its effect upon the people, individually and collectively, that intelligence and humanity are shocked to realize that the least opposition can be found to the universal inauguration of the régime. Of course in this country, as in all other countries, is to be found the occasional crank who is always on the other side of every question. Then, too, there is the occasional individual whose selfish interests are menaced by the public welfare. With these are always to be found certain blind followers of any person who is at once loud and insistent. As society is now constituted, these people, acting more or less in their individual capacities, may be said to constitute the normal opposition to progress. Of all the civilized countries of the world, the United States has the peculiar and questionable distinction of having these elements organized into a nation-wide movement to defeat, not only the

medical inspection of schools, but all other statutory efforts to prevent disease and promote human efficiency thru the observance of hygienic law. These people, in their organized capacity, having raised the shibboleth of "Medical Freedom," are engaged in an active propaganda to impose the tyranny of their selfish interests upon the people. The movement was instigated by a man long identified with medical methods outlawed by legislation that the people have wisely enacted for their own protection. He is now using the organization as a medium for the free advertisement of his personal journalistic enterprise. With him are individuals who fattened on the sale of enslaving nostrums, others whose welfare depended upon the sale of doped foods, two classes of individuals that are naturally enough arrayed against the pure food and drug laws of the states and the nation. Among them are a few physicians of questionable antecedents, who openly base their opposition upon the declared apprehension that their particular "ism" or "pathy" may not be duly represented in the administration of these beneficent health measures. Another element of the organization is made up of those who oppose health legislation and thus favor the spread of disease that they may make money by imposing upon ignorant credulity the ridiculous doctrine that there is no such thing as disease.

With men capitalizing human credulity for the promotion of their publication enterprises; others to sell nostrums and impure foods; others to bolster up waning professional fortunes; others to promote revenue-yielding cults—I say, when we see all these elements with their blind but well-meaning followers banded together under the banner of "Medical Freedom," and directing their energies to the defeat of the medical inspection of schools, and other health measures, we are justified in charging, as I do charge, that the organized opposition has resolved itself into a conspiracy to propagate disease for commercial purposes. In carrying out their enterprising exploitation of the people, in their effort to increase the death-rate among children, in their effort to spread disease and dependency among all classes, thus to increase their personal gain, it is but natural that they should seek to hide their real purpose behind a false issue. They have raised the cry that the meaning of all this health legislation is to deprive the individual of his right to employ the physician of his choice, and on this falsehood, they have solicited and received contributions to their corruption fund. This fund has been and is being expended in large amounts to pay an army of canvassers, to print false and misleading literature, to buy up the press, to employ otherwise respectable lawyers as lobbyists, and in various other ways to influence legislation adversely to the health interests of the people. I am not prepared to state to what extent, if any, the large funds of this organization are being diverted to the immediate personal profit of the promoters. They might well waive this bagatelle in view of the larger stake for which they are playing—a stake represented by hun-

dreds of millions of dollars in the capitalization of enterprises that either have been or are rapidly becoming contraband of law. I make no mention of the similar sums reaped or sought to be reaped under the guise of "fees" by these thoroly parasitic classes.

In it all, however, may be seen the substantial reason underlying the "organization," to counteract the disastrous results of whose methods it well behooves the two altruistic professions of education and medicine to work hand in hand. The effective remedy is to be found in universal publicity.

Carry the message to the people.

E. SOME PROBLEMS IN EDUCATION AS RELATED TO THE PUBLIC HEALTH

HARVEY W. WILEY, CONTRIBUTING EDITOR, "GOOD HOUSEKEEPING MAGAZINE," WASHINGTON, D.C.

One of the most important problems of education is found in the proper nutrition of the child. Poor food, badly cooked food, deficient food, and excessive stimulation unfit children for proper mental growth and physical culture. Let me care for the health of the children and I don't care who doctors the adults. I shall not undertake tonight to discuss this question in much detail in the few minutes which are assigned to me. I will mention only the high points, the *fastigia rerum*. It is a lamentable fact that in many of our city schools, especially, children are at a disadvantage by reason of improper clothing and the necessity of doing without nourishing food, especially at luncheon hour. In some cities attempts have been made to remedy some of these deficiencies, especially those relating to poor luncheons. In the city of Washington the school authorities established a number of tables where a simple but nutritious lunch could be bought for a penny by some of those who were unable to bring proper food from home. Where this experiment has been tried it has been the universal consensus of opinion that the scholarship and deportment of those who received these simple benefactions have been improved. To show the hold that mercenary interests have on the country I may say that, when these attempts were made in Washington to supply wholesome and nutritious luncheons to the poor children, protests were made by dealers in candies, etc., in the vicinity of the school against the practice, on the ground that serving the luncheon in the schoolroom prevented the children from coming into their stores and buying the stale things they had on sale. Happily this commercial objection did not succeed in breaking down the plan adopted by the school authorities in Washington.

The proper kind and amount of children's food is a matter of tremendous importance but I will not take further time for it now. I have a

more important message to present, at least, in outline, namely, that condition of school children, which for lack of a better term, is called nervousness. What is it that has ruined the children's nerves? In my opinion it does not as a rule come from overstudy, tho occasionally that might have been the case. The trouble with the children of this country is that after the manner of their parents they are also subjected to exhilaration by stimulants of various kinds, which have no food value and can work only injury to the child. I refer especially to coffee and tea obtained at home, the acquisition by boys of the tobacco habit, and the indulgence by boys and girls in the so-called soft drinks at the drug-stores, which contain cocain or caffein. Fortunately the effectiveness of the campaign against cocain has driven most of the beverages containing it from the soda fountains, but this is not true of those containing caffein. The drug division of the Department of Agriculture secured the names of over one hundred so-called soft drinks sold at soda fountains which contained either caffein or cocain or both. As a rule no soda fountain sells over two or three of these soft drinks but they are offered in the large numbers which I have mentioned in the various parts of the country. Inasmuch as everyone has agreed that cocain is a substance to be kept out of foods, I shall confine my remarks solely to those products containing caffein. The health officers of Washington issued a letter of caution to parents, in which it was urged that they should not allow their children to use tea or coffee at home. Nothing was said in this circular, however, about patronizing soda fountains where beverages containing caffein were sold. In point of fact, it is commonly admitted by experts that caffein-bearing beverages taken upon an empty stomach are more injurious than the same amount of caffein would be consumed with meals. Now the consumption of tea and coffee at home with meals is less dangerous than the drinking of caffeinated beverages at the soda fountains. The name of one of these beverages most frequently found is coca cola. Indeed it is somewhat rare at the present time to find a soda fountain that does not sell this beverage. A glass of coca cola contains about the same amount of caffein as a cup of tea or coffee, and children in drinking this are doing the very thing their parents would not have them do if they knew it. The authorities should be as careful to caution against the use of coca cola as against coffee and tea. It is bad enough for grown people to drink these beverages, without offering them to children.

But there is another reason why the children suffer with that indescribable condition which, for lack of a better term, is called nervousness. While we do not inherit infectious diseases and nervousness itself, we may come into the world with an inheritance which is favorable to the breaking-down of the nervous system. Why, may I ask, is this the case? The answer is obvious. We are the most bedrugged nation of the earth. If you are suffering with a bad cold and start down the street every friend

you meet has some remedy to offer which is sure to cure. You are dosed with physic for the least ailment. Men and women are victims of morphin, codein, heroin, cocain, chloroform, and cannabis indica. They are saturated with tobacco and alcohol and this added to the everlasting drugging is entirely sufficient to account for the destruction of our nerves. They cannot resist the bombardment.

How often do I hear the phrase, "I can drink a strong cup of coffee with no ill effect." The same excuse is urged for the use of alcoholic beverages. "I drink a glass of beer, or wine, or whiskey, without feeling any ill effect," says the one who is addicted to the drug habit. "I never become intoxicated," but it is not the fourth or fifth drink of whiskey which intoxicates—it is the sum of the first, second, and third drinks. If there is no foundation there is no structure. Because the injury is not measured by an ordinary rule of dimensions, is no reason that it does not exist. The result is that not only are our children subject to all kinds of nervous defects but the grown people even more so. Often is it said that these stimulants are useful for mental effect; learned men have recently written treatises at the instigation of the Coca Cola Company to show that caffein is positively beneficial. A story is running thru one of the magazines showing that the brilliant playwright cannot produce a striking success except under the influence of alcohol. All such stuff as this is merely illusionary. Neither coffee, nor tea, nor tobacco, nor alcohol, nor opium, nor cocain, nor hasheesh ever produced a brilliant thought. They sometimes cut loose the sense of responsibility and make one feel as if he were a genius, but they do nothing but harm. The inhabitants of the Grecian peninsula owed nothing of their genius to any of the dopes mentioned above. The world would be better today if coffee, tea, tobacco, alcohol, morphin, opium and its derivatives, cannabis indica, acetanilid, and all their progeny, relations, and asymptotes were blotted from the face of the earth.

But it is not for me to describe what men and women of mature age shall eat, drink, and smoke. My duty is to save, if possible, the children. If we can save the children, all right we need not have much fear of the men and women that come after. They will be strong, self-reliant, and capable of taking care of themselves. My plea, therefore, to the teachers of the nation is to join in the great work to banish from the menu of the child every single substance which hits the nerves, excites undue activity, or produces unnatural stimulation, and substitute in its place a wholesome, nutritious, plain, simple diet, which may enable the child to grow and become a healthy and valuable citizen.

TOPIC: RURAL LIFE CONDITIONS AND RURAL EDUCATION

A. A SOCIAL AND EDUCATIONAL SURVEY OF THE RURAL COMMUNITY

WARREN H. WILSON, SUPERINTENDENT OF THE PRESBYTERIAN DEPARTMENT OF CHURCH AND COUNTRY LIFE, NEW YORK, N.Y.

A great French observer declares: "The Anglo-Saxon has two passions; the love of land and the desire for education, and the desire for education is the greater." At the present time American country life is a field of conflict between those two passions. To find better schools the farmer has deserted the country, because the schools in the open country are inadequate.

We have been making a scientific survey of country conditions to discover what ails country churches and schools. We have studied the one as thoroly as the other, and all the churches with equal care. Our examination has covered economic, social, educational, and religious factors of country life. These surveys have covered seven counties in Pennsylvania, three in Indiana, thirteen in Illinois, three in Missouri, and one each in Kentucky, Tennessee, and Maryland. We are now engaged in the study of rural conditions in the whole state of Ohio and this fall will be prepared to report on about twenty counties in that representative state. The church and school in the country are the institutions whose condition indicates the welfare or the decadence of the country community. For the church and the school are the eyes of the country community.

The first thing we find in the country is that rural life is organized by labor alone. Nobody stays in the open country except to work. The movement "back to the land" has no influence on the rural problem. The city man is an alien. He cannot improve the churches and he cannot direct the schools because he does not get his income from the land as farmers do; and they will not accept his leadership. In the country itself the only class of men who are generally retained in the open country is the working farmers. The merchants have gone to the town and the country stores are closed. The blacksmith shop is at the village and there are collected all those agencies of country life such as lodges, insurance companies, fertilizer stores, feed-stores. Everything except the factories where the machinery is made is in the village and the town; and those factories are in the big city.

The school-teacher and the preacher do not live in the country. The modernized school goes no farther into the country than the big village. With the exception of a few consolidated schools it is not to be found in the open fields. The rule in the country is the one-room school, taught by an untrained woman who remains at her post not more than a year. The preachers are little better; for they do not live in the town where they generally preach and they preach in the country where they do not live.

The causes of this industrializing of the open country are: First, the exhaustion of the free land in the West, causing the farmer to work harder for a living on impoverished land. Secondly, the first values of the land are exhausted and the farmer must deal with marginal values now, for which he has no adequate education. You do not need to be trained to pick up initial values from a virgin soil, but to farm a land when the first values are exhausted requires a trained mind and a skilled hand. But the main reason for the laborious character of farming is that in recent years the farmer, who used to live on his products, has come to live on his profits. He used to be a producer of what he required, but now he is a consumer and purchases nearly all the necessities of life. He no longer wears his own wool or linen or leather, nor eats his own meal or meat; this means he must live on his profits. To have an adequate profit he must necessarily work harder than his father did.

This labor to which country life is devoted, hard as it is, does not produce enough to feed the country. I will not dwell long upon this, for others have made it so clear that I can hasten. But this country, which twenty years ago was exporting corn in vast quantities, has steadily decreased her exports until in a few years, unless we learn better how to farm, we shall be an importing nation buying our food abroad. Already we are purchasing potatoes from Scotland and other kinds of raw material from countries whose soil has been tilled for a thousand years.

This is a serious issue, for in the next thirty years we must double the total of food products used by the people. The last time we doubled our food and raw material needed, we accomplished it by doubling the acreage of land under cultivation. This we cannot do again. We must now double the quantity raised per acre, if we are to continue to feed our own people, in this great and newest continent of the world. To do so the school must be near at hand to the farmer, in which he can learn the secrets of better agriculture.

The labor on the farm is not only deficient in production, but it gives an inadequate profit. I know well that I am speaking in Illinois, and you think that this state is rich, you boast of the profits which farmers are making. But what has happened is this: the price of land has indeed gone up, while the value of land has gone down. Land which in Illinois used to raise with indifferent farming ninety bushels per acre is producing now with better tillage fifty bushels of corn per acre and a little less. But in the mean time, while its actual value for producing food has gone down so rapidly, its selling value has increased from $60 per acre to $175 per acre. It is producing less but it sells for more.

Now this lack of income from the land is the trouble with the country community. The farmer can make less, but he is constantly offered more for his land. On this price the actual interest he can make on his money invested, in many Illinois farms, is reduced to about 2 or 3 per cent. He

knows that he can sell his farm at any time, deposit his money in the bank, and receive the same or more as an interest payment, without working twelve hours a day.

This trouble is increased by the fact that many city people want to dignify themselves with farm land. They are putting their money into farms at a price which forbids a bigger income than 3 per cent on their money. They want to feel that they are proprietors. But the farmer must compete with them and he is unable to live on a 3 per cent income. So that these absentee owners are depressing country people by preventing the ownership of land by working farmers.

But if you believe that farmers have adequate income, I refer you to the survey recently made at Cornell University, which showed that the farmers around that splendid institution, devoted to helping the farmer up, get an income of less than $1.20 per day for their work. Henry C. Wallace, of Des Moines, recently declared that in the state of Iowa the profit on farms was measured by child labor put on the farms. In the city we think it disgraceful that a child should work, but in such a rich state as Iowa the farmer's only source of income in average instances is the labor of children. I might go thru instances, and I admit that this question is now under investigation; but I begin to believe, for my part, what the farmer says when we go to him to propose the improvement of schools or churches or roads in the country. His reply is: "I cannot afford it," and I cannot but believe that the farmer is telling the truth.

The principle is this: social improvement cannot be paid for on credit, but productive improvements can be. As the selling price of land goes up the farmer's credit is increased, he can borrow more at the bank and with this money he can build silos, buy blooded stock, fertilize and drain the land, paint his barns, and if he lives far from town purchase an automobile. All of these are productive improvements and can properly be paid for with borrowed money. But churches and schools and better roads are social improvements; they can be paid for only out of the profits. You and I have no right to ask a farmer to mortgage his land in order to consolidate the schools or to raise the minister's salary or to support a missionary in India. These needs must be paid for with that money which is over and above all fixed charges and all expenses, including the interest on his invested capital. So that as the face value of his land goes up it does not increase his income nor enable him to pay for social improvements. Instead it diminishes his labor income.

This results in the condition you see thru all the Middle West. The farms are improved, the houses are painted, the barns are repaired, good machinery is everywhere, the quality and the grade of live stock are higher, but the churches are neglected and the schoolhouses are out of repair and the roads are hopeless. What else could you expect in a country where the prices of land have gone up and the income from land is but little if at all improved?

The result of this we have found in the increase in the proportionate number of renters who own no farm land. Are you aware that in this splendid central state of Illinois, in the corn belt, 53 per cent of the farmers in the country are renters? We know it too well who have churches to care for in the country, because the renter has only a one-year lease. His average tenure thruout the United States is two and a half years. We are finding that in Ohio he stays on a farm two and four years. But, however long he stays, the American renter has no legal right to the land for more than a year. The law sustains him only while he is raising one crop. The laws of this country have made no allowance for a renter. He has no especial standing before the courts. The lawmakers in none of the states expected that an American farmer would ever be anything but an owner of the land he tilled. Yet thruout the country as a whole four farmers out of ten are renters on one-year leases.

Now, there is nothing wrong with the tenant. He is as good a man as the owner. It is the condition, not the man, that determines the social institutions in the country. My people have been renters in Ireland for three hundred years and have lived on one piece of land, supporting the same church and the same school. But the American renter is a nomad. He moves constantly. He is an outlaw because there is no place for him in the legal system of state or nation. He has no legal right to the fertilizer he puts in the soil. The result is that he fertilizes not at all and robs the soil as a custom.

The renter of the land needs a better school for his children than the owner does because his family life is poorer; the wife is harder worked; the husband and father has heavier burdens and anxieties than the owner has. They need a better pastor and a better teacher; but they are unable to supply themselves with as good a church or as good a school as the owner can. So that the whole system in the country, unless it be helped thru changes of our laws, and especially thru a better school and a better church than we now have in the country, will tend downward. The danger at the present time is very great. Remember that our system of tenantry in America is worse than that in any country in Europe. We are defended from the ill condition of England, Ireland, or Germany only because our soil is still younger and is not yet fully exhausted.

In this condition, the one-room school renders no help whatever. The teacher herself is an "absentee," teaching in the country while she looks for something better. Seldom does she stay longer than a year. I was informed that in Georgia 88 per cent last year of the country school-teachers were each teaching for the first time in that school. In many of their schools the condition among the children was even worse; as for instance, in one country school of 27 children, 25 were newcomers who had not been there the year before. This was due to the renting system in a state where above 60 per cent of the farmers are renters.

But the trouble with the country education generally is a wrong principle. The notion is to make the boys and girls into gentlemen and ladies. The teacher says she is there to "train personality" just as the preacher declares that his only business in the world is to "save souls." The country school in this particular boasts of the number of scholars it "has turned out." They tell of judges and generals, governors and great men of varied lines who went thru their schools. But the school is not tested by the brilliant people who happen to have escaped its influence. It is tested by the dull people who are dependent upon its influence. The New England states exhibit in every town the evidence that the one-room country school gives very poor education to those who get nothing better. Communities that have "sent out" so many brilliant people are sorely in need of the leaders and geniuses whom the country school inspired with a desire to get away from the farm.

The farmer cannot reform his own schools. We might as well understand that at the beginning. The country school must look for its renovation to the teaching profession. The task of farming is too great and the transformation thru which it is now going, too severe for the farmer to think of anything but selected seed, silos, test of cows, and the spraying of orchards. It is the business of such a body as this to forward the reform of the country school. Let us be perfectly sure that the farming occupation itself gives no promise of educational reform.

The school needed in the country is now clearly indicated. If you will give us such a school as this, I am sure that we shall give you a successful country church. I care not of what denomination we are, we wait for the service of the teacher, before we can build permanent social institutions in the country. First, the country school of the future must teach the book of Nature. Botany must be taught, not as I learned it, a glossary of Latin derivatives to be studied, a lens, blotting paper, and the co-operation of a pretty schoolmate; but botany means corn and potatoes, and to teach any other kind of botany in the country, to fail to tell the country boy that corn and wheat are flowers, is to betray and to impoverish the farmer. Whoever robs the farmer robs the whole country.

The country school ought to teach the child about the birds that fly overhead, the farmers' friends. It ought to teach the nature of the soil and educate the American school boy so that he will know as much as the Danish peasant. For the poor Dane brought up on a swampy farm of ten acres under the North Sea can analyze his own soil and test his milk for butter fat; he can cure his own bacon better than Armour and Swift can. They have no trusts in Denmark because the farmer is educated.

Secondly, the country school of the future will teach all of the children. It will not attend only to the geniuses nor spend time on the boys that are going to the city or to college. It will set its standard by the boys of the local community and the girls who are going to live happily and with profit in that place.

The country school that is worth the farmer's money, in the third place, will be in the center of the community, will cultivate recreation and social life and by this means contribute to the social training of the children.

Fourthly, the country school, whatever it be, requires close supervision by experts, not elected but appointed, in order that the individual teacher may have behind her not a careless committee of country directors or a place-seeking politician, but a trained supervisor who will give continuity and character to her work.

For my part, I believe that this burden of educating the farmer for present-day needs cannot be borne by the one-room school and the lone teacher. The institution is inadequate to the strain put upon it. We need the consolidated rural school in the country, where out in the open country three or four teachers, with a principal, trained for their work and well paid, with an adequate plant to work in, shall educate the children of the whole countryside. These children shall be brought to the school in wagons. Instead of ten indifferent, poorly trained teachers, I would substitute four teachers and four wagon-drivers. There you have an institution adequate to the needs of country life.

But whatever be the form of the school needed in the country for the support of a rural community and the improvement of the condition of the farmer, I believe this formula will describe it: The country school should be such as to educate the farmer's son and daughter until eighteen years of age, in farming and in country life, while they live at home, sleep every night in their own beds, eat every morning at their mother's table. Nowadays, for agricultural training, the boy has to go to the city or the girl must go, for normal training, far away from home: and they never come back. But the school I have described will build up the community. The teacher and the parent will co-operate in the education of the boy and the girl to honor the father's profession, not to despise it; and to follow the profession with profit to themselves and with abundant provision for the rest of us thruout the country. Thus the cost of living will be lowered because the education of the most fundamental occupation of all is made productive and profitable by a good country school.

B (1). WHAT IS BEING DONE TO MEET THE PROBLEM BY THE SCHOOLS OF GUILFORD COUNTY, N.C.

T. R. FOUST, COUNTY SUPERINTENDENT, GREENSBORO, N.C.

Guilford County, North Carolina, is situated in the central part of the state and has an area of 672 miles which is practically in the form of a square. Its population is 64,000. Of this population 25,000 live in the cities and 39,000 in the country. Last year the rural school fund was $105,000, and with this amount the rural schools of the county were in

session for an average of 119 days. Our rural schools are supported by what is known as the general school fund, and then each township or school district is permitted under the law to levy a special school tax, provided a majority of the people will vote in favor of said levy.

About ten years ago a real interest was awakened in the development of the rural schools, and a campaign was inaugurated to encourage the people to vote a special tax in order to lengthen the school term and secure better teachers and equipment. This movement gained rapidly and the county now has over two-thirds of its children in the rural districts attending schools which are supported in part by a special levy. This increase of the school fund has enabled the county to build good houses, to furnish good equipment, and to employ better teachers.

With this agitation for a special tax levy in the various school districts of the county has come a real awakening of the people, and, whereas they were formerly content with a four months' school, now a great many communities run an eight months' school and are not satisfied with less. The old idea in the South, that four months is as long as a farmer can spare his children, is fast disappearing and the reports which come into my office show that the long-term schools of the county are the ones which have the highest percentage of enrollment and attendance, based on the school census. Furthermore, these special-tax districts are larger than those which do not have a special school tax, and, consequently, the children must travel a greater distance in order to reach the schools. This proves conclusively that it is not a question of distance, but the quality of the school that determines the regularity with which pupils attend.

Co-ordinate with the agitation for better rural schools came the agitation for better roads, and ten years ago the county voted a bond issue of three thousand dollars to be spent in building permanent macadam roads in the county. This bond issue has been entirely spent and the county now has over one hundred miles of permanent road. The Board of County Commissioners is each year building approximately ten miles of permanent road out of the money which comes from a special levy for road purposes.

While these two movements indicate that the people of Guilford County are progressive, yet rural statistics show that the country people are deficient in three particulars:

1. There are too many cases of typhoid fever and other preventable diseases each year.
2. The average farmer needs a training which will the better equip him for his work.
3. The average country woman needs a training which will enable her to keep the home better and more economically.

Two years ago there was held a joint meeting of the Board of County Commissioners and the County Board of Education to discuss these features of rural life and to devise some plan whereby they can be improved. After several meetings it was decided to secure from the legislature of North

Carolina such laws as would enable the boards to spend the proper amount of money in developing the people of Guilford County along the lines that I have indicated.

The legislature of North Carolina passed a law which enabled any county of the state to employ a superintendent of health to give his whole time to the health work of the county, provided the Board of County Commissioners would appropriate a sufficient amount of money to enable the Board of Health to do this. The Board of County Commissioners of Guilford County readily agreed to appropriate the money and instructed the Board of Health to secure a competent man for his entire time. In addition to the usual duties required of the county superintendent of health, he must deliver lectures in order to educate the people along the lines of sanitation and health, visit the schools while in session, and suggest to parents the treatment that it is necessary for the defective child to have, issue health bulletins, and write newspaper articles to be circulated in the county.

During the past school year each teacher was required to report, on a card furnished for that purpose, a list of the children who had some apparent defect. Ten per cent of the children who attended school had some defect which was so pronounced that even a layman could detect it. When the superintendent of health visited the school he called for those children whose names had been furnished by the teacher and gave them a thoro examination. When he reached an opinion as to the cause of the lack of physical development, a card was sent to the parent suggesting the treatment that should be given. Dr. Ross, the superintendent of health during the fall of 1911, delivered lectures in various parts of the county and had stereopticon views illustrating the four principal diseases which lower the vitality of our people and cause the most deaths. These four diseases which he illustrated by slides were tuberculosis, smallpox, hookworm disease, and typhoid fever.

The Board of Education of the county and the people for several years had realized that the schools of the county ought to be the means in helping to solve the problems which confronted the farmers and their wives. Two plans were suggested. One was to establish a distinctively agricultural school at some central point in the county, and make it the means of dissemination of knowledge in agriculture and domestic science thru its courses of study and extension work by the teachers in this school; the other was not to establish any distinctively agricultural school, but to do the work thru the high schools which were already in existence by adding courses in agriculture and domestic science to their courses of study. After a thoro consideration of this important question the Board of Education reached the conclusion that it would be better not to establish any separate schools but to use those which were already created and to work thru them. The board did not believe it wise to adopt a system which

might ultimately result in two systems of schools when we are not able to adequately equip and properly support one system. They furthermore believed that the establishment of a distinctively agricultural school in the county might lead to class schools rather than having one system which would train all the children along various lines. Having reached this conclusion, the Board of Education prepared a bill for Guilford County and secured its passage by the legislature of North Carolina in 1911.

By this special act of the legislature the County Board of Education was permitted to make an appropriation for the work in agriculture and domestic science. The state duplicates the amount appropriated by the Board of Education. Beginning with last year, courses in agriculture and domestic science were made a part of the curriculum of three high schools in the county. Each of these schools runs eight months, has a farm of ten acres, laboratories, and equipment for prosecuting work in agriculture and domestic science. We now have in charge of the agricultural department of each of these schools a competent man, and in charge of the domestic science work a competent woman. Our law requires us to employ as teachers of these departments only those who have had special training for the work. In addition to the work in the schoolroom each of these teachers is required during the summer vacation to do extension work in the county. The county is divided into three parts and the teacher of agriculture at one of these schools is expected to do extension work in one-third of the county. This extension work consists in holding meetings with the farmers in various sections of the county; getting the farmers to visit the school farm in order to get the benefit of the demonstration work; visiting the farmers at their homes and helping them to solve the problems which arise on the farm. Each domestic science teacher has charge of the extension work among the women in one-third of the county, and during vacation she is to hold mothers' meetings, and to give instruction in home-keeping and home-making.

We find that both men and women are anxious to improve upon what they are now doing and do not at all resent suggestions from those who have had special training in those lines of work. The real test of the effectiveness of the work, both in agriculture and in domestic science, is the effect that it has upon the home life. We find that boys who have been using the Babcock tester during the past year at school have for the first time been brought to the realization of the difference there is in milk. They have learned from tests, which have been made at the school, that two cows which have a very similar appearance and give practically the same quantity of milk may vary considerably in the amount of butter fat which they produce.

As these schools are open without tuition to all boys and girls in the county who are prepared to enter the high-school course, and as some attend from almost every section of the county, we believe that the influence

of these schools is going to be felt in practically every neighborhood in the county. These boys who are receiving instruction in agriculture in the school during the winter are going to the farms and work there during the summer. They will put into practice some of the things which they have learned in the school, and their fathers will be given the benefit of their training right in the home. What is true of the boys is equally true with reference to the training which the girls will carry into the home. One day last winter, just after I had left one of the schools in which the domestic science department had given a luncheon, I met a man at the railroad station who had two girls in the domestic science class. I asked him if he could see any difference in the attitude of his two girls in the home since they began taking domestic science work in the school. He replied that there was a marked difference and mentioned especially the bread which the family is now eating, contrasting it with the old-fashioned soda biscuit which had formerly been made in the home. Upon further inquiry I learned that the whole community had practically abandoned the old-fashioned soda biscuit and are now eating the wholesome Parker House rolls instead.

Last summer twelve varieties of peas were planted side by side on one of the farms in order to determine which variety is best suited for particular use in our section. The boys were carried to the farm and there saw a marked difference between the various varieties as forage-producers and those which produce more fruit and less forage. The farmers of the neighborhood were also carried to the farm in order that they might see what a difference there is in variety when given the same cultivation on the same land.

It is not our intention to do experimental work on these farms, but rather demonstration work. High-school pupils are not prepared to do experimental work because they are prone to reach a conclusion too quickly, but, by using these farms to demonstrate what has already been proven by experiment, we hope to get the farmers of the county to follow approved plans and thereby materially increase the amount which is raised per acre.

As I said in the beginning, last year was our first attempt in the three lines of work, health, agriculture, and domestic science, and one year is a short time in which to show any marked change, but we do believe that by and thru these lines of work we can materially increase the efficiency of our people. We do not believe that agriculture should be given to the boys and domestic science to the girls solely for the purpose of making farmers and home-keepers, but we do believe that we can better train the boys and girls by giving them these courses in which they have had some former experience and in which they are more interested than we can by giving them the old standard courses of study. We are not in favor of eliminating anything that has been given for its training and cultural influence, but we do believe that the rural boys and girls should be given

the opportunity of selecting those things which pertain more directly to the home life. Two courses are given in these rural high schools, and we have found during the past year that over half of the pupils in the high schools desire to take the more practical course.

While material prosperity is not the end of education, yet the more prosperous and healthy we can make the rural districts, the more able these people are to have the proper system of schools and to bring into the home those things which have an elevating and refining influence. A great deal of the farmer's work is now lost. It is not an uncommon sight in this country to see an entire orchard ruined because the farmer does not know that it is caused by a disease which is so easily prevented. It is the business of the rural high schools so to train the boys and girls that come under its influence that they will not permit this waste on the farm and in the home to continue. It is also the business of the rural high school, thru its extension feature, to teach the farmers themselves and their wives how they can better solve the problems which confront them.

B (2). WHAT IS BEING DONE TO MEET THE PROBLEM BY THE STATE OF OREGON

L. R. ALDERMAN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SALEM, ORE.

The state of Oregon is divided into two distinct parts, the Cascade Mountains forming a natural boundary between the two sections. There are two processes of evolution going on in the state, the one tending to consolidate farms, the other to intensify cultivation, and divide them. In eastern Oregon in the non-irrigated sections, improved machinery makes the consolidation of many small farms into large tracts profitable. One man with a caterpillar engine or a large team does the work of many. One farmer buys out his neighbor, houses are far apart, and were it not for automobiles, country life would be very lonely. However, irrigation is rapidly spreading thruout these dry sections, making conditions very favorable for community life. Here the population is becoming more dense, and rural conditions are improving. In western Oregon the abundance of water supply, and equable climate make country life conditions, as far as the physical side is concerned, almost ideal.

Yet in Oregon the general trend of population follows that of other states, from the farm to the town and city. But little more than a third of the population of the state lives on farms. The city attracts. We are social beings and like to meet our fellow-men. There are many thoughtful men who believe that in the country is the place to live and bring up a family. Many educators believe that the country boy and girl, growing up with many responsibilities, are the ones who really do things in life.

But too many in the country are leaving for the city. They go because country life does not appeal to them. The problem, then, is: Make country life more attractive.

The way to solve the country life problem must be found in the main by the country-dweller. No set of resolutions adopted by a general conference can be effective. One reason why being a producer is not more attractive is because the producer receives only about 40 per cent of what the consumer pays for the same products.

In Oregon we do not claim to have solved the country life problem, but we have several things which I think are worth calling to the attention of the National Education Association. They are our rural high-school law, our supervisory law, our state-wide children's industrial contest, and the new experiment, school credit for home work.

County high-school fund law.—Many people in the country have a great desire to give their children a high-school education, and in order to do it, they will go to the high school, if the high school is not brought to them. A canvass of our city and town population will show a large percentage of people who are there to educate their children. In Oregon, in many counties, it is not necessary to move to town for this, as the high school is brought to the country. The ideal is a high school within riding-distance of every home, so that the child may be in his home at night. Lane County has eighteen high schools, only one of them being in a large town. Eighty-five per cent of all the Lane County eighth-grade graduates of the years 1910 and 1911 were in high schools in 1911–1912. This record challenges comparison.

The law fosters high schools thru the following provision: Each of the first twenty pupils in a high school draws $40 from the county high-school fund; each of the second twenty pupils draws $30 from the fund; and each pupil over the first forty draws $12.50. The tax for the fund is levied on all the property of the county. In most cases the amount does not exceed one-half of a mill. This is a state law made operative only by a vote of the county.

The rural high schools have a wholesome influence on the rural grammar schools, as each child wants to enter the rural high school as soon as possible, and to do so he must make his grade each year. It has been noticed that the attendance in the grades improves when a high school is established.

The supervisory law.—By the old order of things, the more poorly prepared a teacher was, the farther into the country she was sent, and the less supervision she received. Under the new order she is sent just as far, but someone is sent after her to help her. By the Oregon plan every rural school in the more populous counties has a supervisor visit it at least every six weeks. This law has been in operation only one year, but a great change has been noticed already. Sanitary conditions improved at once. Hundreds of wells were cleaned and properly curbed. Faucets from small

drinking-tanks, and nidividual cups replaced the old pail and common dipper. Walks and outhouses were improved; stoves were furnished with jackets and ventilating shafts; better lighting was found possible even in old schoolhouses. The supervisor, visiting the people often, reinforced the teachers' requests, and stimulated a greater interest in the school than the teacher alone could possibly awaken.

But the main thing hoped for and already noticed is the improvement of the teacher in service. The idea is that every teacher be helped so that she may be a year's better teacher at the end of each year. The right suggestion at the right time means in many cases the difference between success and failure.

Our supervisors are selected by a board of five, consisting of the county superintendent and four people selected by him. Only those counties that have sixty or more districts have supervisors, and no supervisor may have more than fifty nor less than twenty districts under his or her charge. The minimum salary is $100 per month for ten months.

Industrial contests.—Believing that the main thing in education is habit-building, and that industry is largely a habit, we have this year launched industrial contests in every county in the state, in connection with the local and county fairs, culminating in the state fair. The State Bankers' Association, the Live Stock Association, the commercial clubs, the women's clubs, State Teachers' Association, county superintendents, parents, teachers, and children are co-operating in this movement, and as a result we expect to have as many as sixty thousand children exhibit something grown or made by them. Four thousand school children in the city of Portland had gardens this spring. Thousands of children are raising chickens and hundreds are owners of pigs. A boy who had won a pig at a fair was asked how his pig was this morning. He replied, "He's all right—how are all your folks?" There is something educative about the care of animals. It broadens one's sympathies. Giving one life into the care of another brings a responsibility that nothing else does. Someone who has taken the trouble to go thru the penitentiaries of the country reports that not one in ten of the inmates ever had a pet to care for.

But the best thing about industrial work is that it brings the boy and his father nearer together. I know two farmers, neighbors; twenty years ago their circumstances seemed very much alike; one of the farmers let his boy have a piece of land, and time to plant and cultivate it himself. He felt that he and his father were in partnership together. When he harvested the crop, he bought the kind of clothes he liked, and had spending money left over. He would talk over his interests with his father as to a comrade. This boy and his brothers are on the place yet. One is building a home near his father's house. The family is happy and prosperous. It is just such a place as one likes to visit.

The other farmer has a fine farm, but he did not take his boys into his

confidence. They felt he wanted from them only what work he could get out of them. They are all gone. He is known far and near as a hard driver, and many of his neighbors are unkind enough to say it is his hard driving that makes him so lonely now.

I have seen fathers this year pat their boys on the head and say, "John has a fine garden," and I have noticed that John almost breaks the top button off his vest as he swells up with pride. That is worth while.

In Yamhill County they have had a school fair for seven years, in other counties for four years, with an ever-increasing number of exhibits, and ever-increasing enthusiasm. Prizes are given for garden products, for cooking—usually bread, jellies, and canned fruits—for sewing, mending, and for butter-making, and carpentering, as well as for pigs and chickens. Generous prizes have been contributed, amounting to $20,000 this year thruout the state. This is partly cash, and partly those things that attract children—such as pure-bred animals, saddles, writing-desks, Shetland ponies, etc.

All this work is home work, in the case of the country children. The school organization, for the present, acts only as a stimulus and a means of communication. Local volunteer committees are formed to encourage the children after the schools are closed for the summer.

School credit for home work.—A few schools in Oregon carry the idea of encouraging industry still further by giving credit for it every day in the school. This plan was been worked out with wonderful enthusiasm by pupils and parents. Some measure the work by hours—or minutes—of home labor, a certain number of minutes being assigned for each task, and a report sent in signed by the parent certifies to the number of minutes' work done each day. Then there are holidays granted for so many hours' work each month, and prizes at the end of the term to those who have the greatest number of hours' work to their credit. Another method is to have the home work marked by the parent, and as much credit given as for any one study. In either case, the child is brought to realize that home work is important. He learns that there is a pleasure in responsibilities. He likes his home, and if it is on the farm, he becomes interested, and wants to stay there. The effect of this industrial work on school work is entirely good. The schools that are accomplishing the most at home are delightfully wide-awake in school hours, and have enviable records for scholarship.

Another condition developing in Oregon is the new feeling of unity and co-operation in rural neighborhoods. This is fostered by the country high schools, which serve as the best type of social centers, forming the nucleus of a larger and more public-spirited country neighborhood. The activities of these high schools attract the adults, and the sheds that shelter the pupils' horses in the daytime shelter the family team during the evening meetings, while the parents mingle with the children in debate, lecture, or social gatherings. A high tone is given to these meetings by the very place

in which they are held, and the people appear at their best, for I believe that the happiest social gatherings are those dominated by some appeal to the intellect. In my opinion adult education in country or city has wonderful possibilities. Again, athletics are drawing the adults together, so that practically all in the country are out Saturday afternoons to witness the ball game between the rival high schools. When country life loses enough of its strenuosity to permit this in the busy springtime, when it will induce the farmer to drop his plow, and mix with his neighbors at a ball game, and yell like a human being, it shows signs of progress. I remember when I used to look at my father and wonder why he did not know that baseball is the most important thing in the world.

This spirit of co-operation is showing itself in other ways. In some communities where they raise the same kinds of crops and stock, they do not advertise as individuals, but as a community. Each farmer is interested in his neighbor's getting the best stock. Under such conditions it is a pleasure to see neighbors talking together. They see clearly that one farmer is not in competition with his neighbor, but that their best interests are in working together to the fullest possible extent.

One ideal of the Oregon Country Life Commission is to encourage real farm neighborhoods, co-operative neighborhoods, with the high school for an intellectual and social center. Another is that Oregon shall excel in the number of farm homes having running water, bathtubs, and septic tanks. We Oregonians want an Oregon farm to be the best place in the world in which to bring up a family.

B (3). WHAT IS BEING DONE TO MEET THE PROBLEM BY THE STATE OF NORTH DAKOTA

JOHN H. WORST, PRESIDENT OF THE STATE AGRICULTURAL COLLEGE AND GOVERNMENT EXPERIMENT STATION, AGRICULTURAL COLLEGE, N.D.

The time limit placed against my report for North Dakota compels me to adhere rather severely to facts, with but scant time for elaboration or comment.

North Dakota, as it is well understood, ranks with the younger states. Pioneer conditions are not yet wholly outgrown. The population of the state, tho rapidly increasing, is yet meager when the vast area of its available farming lands is taken into account. The natural resources of the commonwealth are almost exclusively agricultural. This fact suggests very clearly the character as well as the educational needs of the state's industrial population. The prosperity of North Dakota, consequently, naturally must depend upon the products of the soil and the intelligence and progressive character of those who comprise the rural population.

The culture and industrial efficiency of the great majority of our

people, therefore, must necessarily harmonize with, and bear direct relation to, their rural environment, if the business and social needs of the commonwealth are given practical consideration. The education of our children, especially those of the country districts, in large measure, must be directed toward the farm and in preparation for the best there is in farm life, if the state would discharge its obligation alike to its natural resources and to its present and future interests. The public schools should teach persons how to live, how to conserve, how to economize, and also how to spend wisely. We realize that preparation for the work of life, more and more, is coming to be the object of education. Happily the educators of North Dakota and its foremost citizens are beginning to take this practical view of education. They realize "that every race dug its civilization out of the ground"; that "practical ethics are best insured by making every citizen, at least potentially, a producer," because the wealth that supports our institutions, whether political, charitable, or educational, must come from the earth. All commercial, professional, and transportation interests of the Northwest recognize in agriculture the primary—almost the *exclusive*—resource upon which they must all depend for whatever degree of prosperity they, or the people in general, may enjoy.

As rural life and agriculture are closely correlated, it should require no prophet to forecast the importance of fostering to the utmost every available means, educational and otherwise, by which the conditions on the farm may be improved, by which rural life may be made agreeable—even attractive—for the sake of *agriculture*, because upon it the world so trustfully depends, and yet for which the world apparently manifests but little appreciation. Moreover, grave danger must inevitably result from any serious neglect of this fundamental vocation which so cheerfully bears the burden of the whole country—except as to the administration of its political offices—and yet which scatters prosperity with such liberal hand. Education, both practical and theoretical, therefore, is invoked in North Dakota for the purpose of strengthening the rural sentiment, for improving rural conditions, and for more firmly anchoring the rural families to country life. To insure this end, influences are at work to raise the standard of living on the farms; to improve the business methods of farming; to dignify and render congenial and highly intellectual the labor in the fields and with the flocks and herds, and above all, to displace the drudgery that is commonly associated with inefficiency, by substituting instead a welcome toil founded upon intelligent achievement.

Traditional education too often covers the fingers with rings, but destroys their power and ability to do things. Few people are needed in this world for mere ornamentation. The modern trend of education, therefore, is to produce useful, productive citizens.

What, then, is North Dakota doing to meet the problem of rural life conditions and rural education?

1. The Better Farming Association: This new organization is financed jointly by individuals and counties and directed by a superintendent with some thirty assistants. These agricultural experts are working directly with farmers at their homes, for the purpose of improving methods of cultivation, conserving moisture and fertility, eradicating weeds and fungous diseases, exemplifying the advantages of improved seed grain and improved live stock, determining the cost of production, and by means of experiment and demonstration they aim at placing the manifold operations of the farm upon a highly interesting as well as upon a more profitable basis.

Already increased enthusiasm is noticeable. A lively interest in improved agriculture is displacing drudgery and the application of scientific methods and modern machinery to farm management is lifting the burden from overwrought muscles, both on the farm and in the home. The growing plants and the developing animals are looked upon with new interest, while improvements observed in both plants and animals readily appeal to progressive farmers as new creations. The country home shares in the general enthusiasm. The children are beginning to look upon their parents' vocation as one of dignity and importance.

2. Mr. James J. Hill, the empire builder of the Northwest, at his own expense is having conducted hundreds of experiments and demonstrations along similar lines for the purpose of proving to our farmers that there is vastly more in rural life and in the business of farming than has heretofore been realized, and that agriculture is a vocation to be coveted rather than avoided.

3. A mass Grain and Stock-Growers' Convention is held annually at Fargo, North Dakota. This convention holds four-day sessions and is attended by an average of three thousand farmers and their wives. During its sittings every phase of rural interest, whether of the farm or of improvement of the home, is discussed by men and women of large experience and all with special reference to the betterment of rural conditions and rural education. During the last session of this association a rural life commission was appointed with authority to report a plan for general co-operation to the next convention.

4. The Legislative Assembly of the state, recognizing the importance of solving the rural life problem in part by means of vocational education, and moved largely by influences exerted by the State Educational Association, during the session of 1911 appropriated a respectable sum of money as state aid for the rural schools, providing, however, that in order to be entitled to state aid for rural schools, elementary agriculture shall be included in the course of study, and further that rural schools of the first class shall be maintained for nine months and schools of the second class for eight months each year. An inspector of rural schools also was provided for, together with salary and traveling expenses.

5. The Assembly of 1911 also subsidized five city high schools in the sum

of $2,500 each to meet the added expense of giving instruction in agriculture, home economics, and manual training, in the same thoro manner as other high-school subjects are taught. The high-school board, to which was intrusted the location of these schools, wisely ordered that these subjects only (or studies directly related to them) may be taught by their respective instructors, and that such instructors must have had special training for the respective departments over which they preside. The instructor in agriculture must hold a degree from an agricultural college, while the instructor in home economics and the instructor in manual training must each have had at least two years of special training, above the high-school grade, for their respective departments.

That the number of subsidized agricultural high schools will be gradually increased from year to year is altogether probable.

The normal schools of the state offer courses of study and training for the preparation of teachers as here indicated, except for agriculture in the subsidized high schools, while the State University and other state schools, as well as the Agricultural College, prepare teachers of agriculture, home economics, and manual training for the public schools.

6. An act was passed by the same assembly providing for the establishment of county agricultural and training schools and for their joint maintenance by the state and county and providing for a levy of state tax for the raising of funds to meet the state share of their cost and maintenance. Schools have not yet been organized under the provisions of this law, but the opportunity is open for any county that so elects to take advantage of its provisions.

7. It would, perhaps, be superfluous to add that the State Agricultural College is alive to its duties and opportunities to serve both parents and children, directly and indirectly, so far as the college and experiment stations can be of service to them. In addition to four-year graduate courses in agriculture, home economics, etc., for the purpose of training young men and young women for the teaching profession and for practical purposes, abbreviated three-year courses, requiring college attendance during but twenty-two weeks each year, are offered in farm husbandry, in home-making, and in power machinery. These abbreviated courses, designed specially for the training of practical farmers, efficient homemakers, and managers of farm or power machinery, are each annually patronized by scores and hundreds of enthusiastic young men and young women, mostly from the rural districts, who are too engrossed with home duties to spare more than a limited portion of each year in school. For such the Agricultural College feels justified in offering courses of study suited to the time and means these young people can spare and that relate directly to the lives they contemplate living and the things they contemplate doing.

In the practical courses of study emphasis is given to living as well as

to working; to the betterment of the home and family as well as to improvement of crops and livestock.

8. Winter short courses of ten weeks each are offered at the Agricultural College for boys and girls and grown-ups as well, who do not feel able or who are not ambitious to spare more than that much time from home duties. These short courses are open to all ages, and consist chiefly of lectures and demonstrations bearing upon practical farming and household affairs, and appeal strongly to those who are not accustomed to consecutive study.

9. The extension department of the Agricultural College, in addition to supplying nearly three hundred newspapers, magazines, and agricultural journals with literature and observations calculated to be of service to their rural readers as well as to make better and happier country homes, also enlists the country school children in useful outdoor and indoor exercises. These exercises have taken the form, chiefly, of corn- and potato-growing contests for the boys and bread-making and sewing contests for the girls. For the current year more than fifteen thousand boys and girls have entered these contests, generally under the local encouragement of county school superintendents, but all are directed from the Agricultural College. Many prizes for best results are offered by individuals and by local authorities and during the holiday season the prize-winners are given a week at the Agricultural College by their respective counties, where they are provided with free entertainment and daily instruction, consisting of lectures, nature themes, athletic exercises, simple demonstrations, etc., all regularly scheduled and presented in language adapted to their understanding. It is a week crowded with daily programs intended to inspire their young minds with the beauty, the orderly arrangement, and the benevolence of God as manifested in the works of Nature, and also with man's power to direct Nature's forces for his comfort and well-being. This visit to the college and the week spent there by these gaily badged and carefully chaperoned youngsters will long be remembered by them as the most enjoyable vacation of their lives. They return to their homes with keener relish for study and with profounder admiration and respect for the life on the farm.

10. Movable schools of about ten days each also are conducted by the extension department. Farmers together with their wives and grown-up children freely attend these schools and listen from day to day to the lectures that are offered and to the illustrations and demonstrations that are given. The course of instruction covers the practical phases of farm management, animal husbandry, and dairying, and the numerous problems that interest as well as perplex the housewife. These schools move from village to village during the winter season, and are growing more popular every year.

11. The Agricultural College Package Library, consisting of collections of pamphlets, bulletins, booklets, clippings, etc., each package bear-

ing upon some special agricultural, economic, or social question and of particular interest to rural communities offers free service to the citizens and school children of the state. These packages are in growing demand by those studying such subjects as the country church, the consolidated rural school, how to beautify the country home, the manly art of self-support, etc.

12. A regular system of farmers' institutes and extension lectures is maintained at state expense, the former directed by a superintendent and corps of lecturers under a state board of control, while the latter is directed by the extension department of the Agricultural College.

The rural life problem is freely discussed at all farmers' gatherings and suggestions offered for its improvement.

13. I wish to add in conclusion, just to indicate the trend of sentiment in North Dakota, and the enterprise developing in favor of rural improvement, that the Northern Pacific Railway Company and the Agricultural College jointly fitted up a train of twelve coaches, under the direction of the superintendent of the Farmers' Institute. This train, which completed its work just two weeks ago, was the most unique and elaborate of its kind that has ever been attempted in the United States or perhaps in the world. The train carried five types of live stock; a model poultry house with chickens, incubators, brooders, nests, etc.; one carload of grain-cleaning and spraying machinery; one coach filled with every modern device for labor-saving and sanitation apparatus for the up-to-date home, exhibited in miniature, together with working models showing the advantage of hot-water and hot-air heating systems, the pressure tank, septic tank, gas and electric apparatus for lighting, cooking, etc.

Equally in detail were exhibits pertaining to veterinary and animal diseases together with scores of exhibits to illustrate the subject.

Fully as interesting and instructive were the exhibits of horticulture; of chemistry, with special reference to food adulteration, food values, patent medicines, etc.; agriculture in all its bearings; biology, with special reference to plant diseases, etc.; also engineering with special reference to farm and household machinery. In short, it was the Agricultural College on wheels for three weeks, with twenty-seven professors and instructors in attendance to explain the meaning and purpose of the exhibits as the more than sixty thousand people passed thru the train while on its journey thru the state.

Fully a dozen correspondents accompanied the Farmers' Institute Special to report the enthusiasm with which this train was received by the farmers and villagers wherever it went.

At all rural gatherings discussions are mutual. Questions are asked and answered. The farmer's problems are considered from his own viewpoint, those of his wife from her viewpoint, and the children's from theirs. The ultimate aim is to make the country home a convenient place to work, an attractive place to live, and to make rural business sufficiently profitable

and agreeable that rural vocations shall be sought after by ambitious young men and young women instead of preparing themselves to fill, as is too often the case, cheap places in overcrowded cities—and I believe we are succeeding.

To accomplish this end we recognize the importance of education directed specifically toward the improvement of rural life conditions—education that will dignify labor as well as make it more profitable; that will educate the family as well as the children; that will ultimately professionalize agriculture as it has professionalized law and medicine, and thus restore God's great textbook, Nature, to the love and admiration of his children.

C. THE HUMANITY OF HIGHWAYS

MRS. FRANK DE GARMO, DIRECTOR OF COUNTRY LIFE DEPARTMENT, NATIONAL CONGRESS OF MOTHERS, ST. LOUIS, MO., AND COLLABORATOR, OFFICE OF PUBLIC ROADS, WASHINGTON, D.C.,

The child is the one great care of society. It is not at the child's past, but its future, that men look.—Jacob Riis.

No work for childhood will produce its most desirable results, that of developing good citizens, physically, mentally and morally, unless the mother, with her mother-thought, and her mother-love, enter into daily and active co-operation with those who labor for childhood, in the home, school, church, or society.

Heretofore, teachers have assumed responsibilities of crushing weight by taking every need of the child into the school. The usual home and farm activities, personal hygiene, and play have been added to the already crowded curriculum. What the teachers have not undertaken to do, the factory and the church have agreed to perform. Motherhood is thus shorn of its human and divine attribute, of personally caring for the physical, mental, and spiritual needs of the children, as well as rendering efficient assistance toward their social and recreation development.

Parents demand a high standard of culture and education for the teachers. But the same requirements for study, development, and conference along these lines ought to be expected of mothers, before perfect co-operation and unity of purpose can obtain between home and school. Mothers and teachers united would wield by their combined efforts an influence that would be irresistible and of immeasurable power for good.

Parent-teacher co-operation is the significant movement of the age. But such study and wise co-operation is denied to more than half of the parents and teachers of the United States, by the despotism of "bad roads." Some of the human welfare characteristics of good roads are:

Better economic conditions and better homes.
Better schools and better health.
Better churches.
Better spiritual advantages.

BETTER ECONOMIC CONDITIONS

1. Good roads increase population and bad roads drive people out.

2. Good roads increase value of property, and shorten the haul to market by shortening the time.

3. Good roads reduce the cost of living, because all that we eat and drink and wear—our shelter, light, and heat—come primarily from the soil, from which the materials, raw or finished, must first be hauled over roads to stations and wharves for shipment, or to market for sale.

4. Good roads would save the farmer $215,000,000 annually, and the expenditure of this sum for the betterment of farms and homes, and the educational and religious training of the 37,000,000 children in our country, each year, for a period of twenty years, would give to every American citizen in 1930 an annual pension of $320, which, for the children and helpless adults, would be showing divine compassion, for it would succor even the undeserving poor.

The enumeration of the commercial value of good roads and the thriftlessness of bad ones could be carried on indefinitely; but the Mothers' Congress, while urging the motherhood of the nation rightly to exercise its queenly power to weave and embroider the fortune of the home by attending to the ordinary and constant duties of conserving its economic and civic conditions, does not appeal to this divinely human "foster-mother" organization, the powerful National Education Association, composed, as it is, of faithful and scholarly members, to aid in the improvement of American highways for the purpose of facilitating the movement of traffic, or for the joy of the swift-moving automobile.

A nation cannot last long as a monetary mob. It cannot become one of the world's leading powers, and concentrate its soul on pence.

A nation, to perpetuate itself thruout the ages, must give all its people literature, science, art, and the ability to enjoy nature thru the avenues of its homes and schools, until generations have homologated the cosmopolite humanity from foreign lands into a people with one language, one country, a national poem, and a national faith.

BETTER HOMES

Good roads turn golden gain into the coffers of the agriculturist. With this purchasing power, the rural home becomes spacious, sanitary, refined in decorations and in the selection of its art and literature. It welcomes to its hospitable doors the instructors of its children, both secular and religious, and it becomes the haven of play and wholesome friendships for all the youth of the community.

Good roads make possible active and frequent interchange of opinions between parents and teachers, which results in a cordial co-operative spirit between home and school. Mrs. Ella Flagg Young has said:

Observation of the spirit pervading parent-teacher organizations leads me to believe that in those organizations is the corner stone for that structure which will make the life of the child in the home and in the schools a unity, not a life divided between two neutral, if not hostile, camps.

Will not this great body of men and women who are building the educational foundations for our children unite with the mothers in this loving unity, with the home and school; doing team work in every public or private school, from the kindergarten to the Senior year of college education? This can be accomplished only thru the permanent improvement of streets and roads.

BETTER SCHOOLS

No longer are mothers content to keep the children at home because of bad roads. They have formulated plans of service and co-operation that will keep the children in school because of good roads. Impassable roads, unbridged streams, lack of recreative amusement, a dearth of sociability, or of an opportunity to enjoy it, toiling and moiling from dawn till late at night, have combined to make dreary and unwholesome environments for the school children in many sections of our beloved country.

Good home environment means good school attendance, and studious pupils, and, consequently, good citizenship. The school reflects the homes of a community. The teacher who makes a remarkable change in the scholarship and ethical culture of the children of any school has had, heretofore, to perform a stupendous task—that of developing the homes along with the school. With improved roads and the prosperous homes will come the consolidated school, the Mecca to which all thinking men and women are now turning their attention. Without improved roads, that is, roads good for all time by proper maintenance, the consolidated or graded school of the rural districts is only a dream, a beautiful dream. Good roads will not only give the country the graded school, but they will create in that school, with its corps of teacher specialists, an opportunity for the country youth which will keep the boys and girls on the farm, and will aid in "lifting the veils of monotony and dreary routine from the shoulders of the 'worked-out' boy of the farm and his sunbonnetted sister."

The country graded school will stimulate the neighborhood activities, and competition will result. This will enable the boys and girls, on account of modern rural-school methods, by their own efforts to bring the best of life to their very doors. These school children will not desert the homesteads for city life, but rather, they will be instructed by capable and far-seeing educators to stay where there is room to grow, thus strengthening the "backbone" of the country.

In this school, there will be found special teachers in manual and domestic arts, and sciences, physical culture, agriculture, hygiene and sanitation; but among the first, if not the first subject taught in the

modern rural graded school will be the subject of *highways*. You smile at the thought of teaching roads. You teachers, who have never taught in a country or village school—can you imagine the agony that is a mother's when she has to awaken her little children and send them thru snow or storm, thru sleet or rain and mud, to a poorly heated, poorly lighted, poorly ventilated, and poorly taught, one-room country schoolhouse—there to shiver thru a day devoted, mostly, by the teacher, to discipline?

The theory and practice of road-building and its benefits have been handed down from generation to generation in most European countries. From their youth up, the men who were responsible for the building and maintenance of their country's roads acquired the knowledge and the spirit that enabled them to carry on the work of their forefathers. We, too, must inaugurate some system that will provide for the boys (and, since before long girls will be women and road overseers and commissioners in some of our states, we must not eliminate them), who will in future years for the most part be responsible for the humanity or inhumanity of the public roads of our nation. The chairman of the Country Life Department of the National Mothers' Congress, acting from this belief, has prepared a simple textbook, the *Ravenel Road Primer*, containing chapters easily intelligible to country school children, during this character-building period of youth, on the value of road improvement for better transportation facilities; also the elementary practices and principles of road construction, and the principle "that the public roads ought to be built by all the people, for all the people." These children will take all this to their homes just as they do their history lessons, and out of the mouths of babes and sucklings will come the strongest influence for the humanity of highways that we can bring to bear. While this educational campaign should be general in our schools, yet perhaps greater stress should be applied to introduce this system in our country schools, working in perfect harmony with the educational associations and all other organizations that are intensely conscious of the "human" value of good roads.

We should ask the highway engineers, and others understanding the theory and construction of roads, to assist the teachers; thus bringing together the two great forces of civilization, the school-teacher and the highway engineer. The youth should be imbued with the idea that good roads are the crying need of our country, and that they must rally to that cry with the same loyalty and oneness of spirit that they would leap to defend their country's flag.

If this elementary instruction were put into all of the schools, immediately the problem of better schools would be solved; intelligent voters will be made; there will be no politics in the "good roads" movement, which has heretofore clogged the wheels of its progress, and country graded schools will be the rule in all the states. City teachers will welcome an exchange of service from city to country schools, where, by this system of

reciprocity, they can rejoice in renewed enthusiasm and good health, the stars over their heads, and the daisies under their feet.

BETTER HEALTH

The statistics already collected are decisive as to the appalling death-rate, often by slow stages, caused by the impassable condition of the country roads. Wet feet and cold schoolhouses are responsible for the increase of tuberculosis in rural communities. The modern style of scanty dressing for girls has penetrated the country schools and the country girls and boys are quick to imitate the style of dress the teacher has brought to the community from his or her "finishing college" in a city with good sidewalks. Insanity, because of loneliness and isolation, owing to the forced imprisonment of women by bad roads; infant mortality, because the doctor came too late; and many other diseases of mind and body are traceable to the unimproved road.

BETTER CHURCHES AND BETTER SPIRITUAL ADVANTAGES

"Life forever keeps the keynote first struck." If so, it is but adding the emphasis of time to that of eternity as to the importance of early impressions. They dominate life, and perhaps govern thru eternity. If the child is to grow into manhood, with strength and beauty of character, he must have an opportunity to attend church as well as school. He must spend time in the cultivation of those higher and nobler elements that make up our humanity. There are three factors necessary to create for him an atmosphere of noble inspiration: the home, the school, the church; but only one of these is attainable in a community of impassable roads. When bad roads prevail, the home is the only source from which he must obtain this potent quality that makes for righteousness, and but few homes are equal to the task of pointing out the grandeur of human life when touched by the hand of God, or of making for the country child high ideals upon which his soul may feed. Without frequent interchange of thought and service, made possible only by permanent transportation facilities, how is he to learn the Fatherhood of God, and the brotherhood of man? Childhood is so ready to respond to that which is high that it is an appalling fact to note the lack of training and soul culture caused by lack of good roads. We are sacrificing our children, the best asset of the nation, to commercialism. We are wasting their rightful heritage of health, education, and spiritual development by spending only a pittance of the funds of the state or nation on permanent highways.

How can children stand erect, and look up to more inviting things on a higher plane, when their little feet are compelled to wade thru a long line of liquid morass, called a road, to go to church or school! If the country school is to be supplied with better teachers, and better libraries and other necessary facilities, it must have a greater number of children

and greater wealth to support it; and this can be had only in a community where the roads are in good condition during the winter months so that the children can be transported quickly, cheaply, and safely a greater distance. The solution, then, of the improvement of country child life is to secure, by judicious means, good public roads. There is no other way to solve these problems.

The taxes for school purposes are levied with the intention of securing, to every child, equal educational opportunities. But how few country children are permitted to reap the full benefits from the expenditure of the school funds on account of the conditions arising from bad, soggy, and impassable roads. And teaching of the best approved modern school curriculum is impossible. Such subjects as elementary principles of road-building, scientific farming, household economics, nature-study, athletic sports, and spiritual truths, which necessitate frequent associations of neighboring children, would tend to produce a high type of intelligence and faith, such as would give them a nearer communion with the forces of creation, and shed around them a moral beauty which would develop good citizens thruout the country. How many country children, with their limited education, could find

tongues in trees, books in the running brooks, sermons in stones, and good in everything!

The present "gospel of good roads" movement by the mothers of our nation, as a means of uplifting country life, should receive the hearty indorsement of the National Education Association, as this organization can have no nobler purpose then the betterment of American childhood, by united effort with the natural guardians of children, their mothers. True mother-love is proud, and yet unselfish. Noble mother-love and mother-thought would give, also, to the barefoot boy and his sunbonnetted sister of the farm palatial school buildings; Alhambra-like libraries, massive edifices, whose Gothic architecture resembles a "frozen prayer"; parks and playgrounds; amusement centers, where toiling and moiling of the long day are forgotten in the enjoyment of innocent pleasures. Sympathetic mother-love and mother-thought would give the doctor good roads, so that the lives of many more country children might be saved, and sickness and suffering speedily relieved.

To be good and do good is human. So are the opposite characteristics. Then who will deny that good or bad roads exercise human powers?

There is nothing which hurts the people more, or costs the people more, or keeps them back more, than bad roads; they make it hard to leave home, hard to get back, hard to haul, hard to visit, hard to get to heaven—sometimes. There is nothing that a man can think of that will do more to help the people than good roads, which make it easy to travel, easy to bring goods home, easy to haul your produce and manufactures to market, easy to go to school and church, and easy to avoid many bitter thoughts that bad roads cause.

What means this reaching-out of women to the lonely mother and child of the fields and hills? It is the spirit of God moving upon the deeps of

woman's soul, arousing her from her long lethargy, and impelling her to aid in continued and higher evolution of the human race. Oh, grand work! To aid in a movement for a higher rural community, and to open wide the gate of opportunity to the "worked-out" boy of the farm and his little sister, so that the farm will continue to give to our nation,

> Men to match her mountains, men to match her plains,
> Men with empires of brotherhood and mother-love in their brains.

In conclusion, may I be permitted to quote the following beautiful lines as equally valuable to mothers, fathers, teachers, and the "good roads" sentiment:

> "What doest thou," I asked a budding flower,
> "To sweeten life?" It nodded from its bower,
> "I'm growing!"
> "And what doest thou," I asked a child who quaffed
> The cup of joy,
> "To help the world?" He laughed,
> "I'm growing!"
> A laden apple tree, old, gnarled, and sore,
> Bent down and rustled softly in my ear,
> "Keep growing!"
> An aged man, with child upon his knee,
> Echoed again the wisdom of the tree,
> "Keep growing!"
> "What shall I do," I asked an angel bright,
> "When age draws nigh?" Then smiled he, from his height,
> "Keep growing!"
> Reach out to pastures now, where the soul feeds;
> Reach out and up—God knows the spirit's needs—
> "Keep growing!"

D. THE SCHOOL, THE COLLEGE, AND THE ENGLISH FARMER

E. J. RUSSELL, DIRECTOR OF THE ROTHAMSTED EXPERIMENTAL STATION, HARPENDEN, ENGLAND

Two well-defined tendencies can be traced at work in English country life: (1) a tendency on the part of the less educated or laboring classes to crowd into the towns; (2) a tendency on the part of the more educated and professional and commercial classes to leave the town and come into the country. The laborers go because wages are and must always be higher in town than in country, because there is more amusement, and more ways of filling up the interval between worktime and bedtime.

The professional and commercial classes come into the country because they like the quiet healthy surroundings after the noise of the city, they have learned to appreciate the beauties of Nature, or at any rate they feel it is the correct thing to affect an appreciation of the beauties of Nature, and, above all, they genuinely love a garden.

We have got, therefore, a process of changing over, the manual laborers moving cityward and the professional classes moving toward the country.

No system of society can be stable, however, unless it keeps a big population on the land, and it has become a serious problem for our politicians and educationalists to try and induce our working men to stay in the country and counteract their tendency to move into the city.

Hence our system of education has a threefold aspect: (1) It aims at giving the children of the laborers and small farmers an interest in country life so they will elect to stay in the country just as do the better educated classes. (2) It gives such instruction as will increase their wage-earning capacity if they do stay in the country. (3) It develops their intelligence so that they can do well in the city if circumstances should call them in that direction.

It is absolutely essential that the interest should come first in a democratic country. Every boy must be left free to make his own choice, even tho his elders feel that he is not acting wisely. And so, if the child is to be persuaded to make his life in the country, it can be done only by implanting in him from his earliest days a deep abiding love of country life. This is not very difficult, but the problem is complicated by the fact that wages in the city are much higher than in the country, prospects of promotion are more numerous, and advancement is more rapid. I have often seen the look of envy on the faces of our village boys as they stood round one of their number who has returned on a short holiday from his post in the city, wearing smart city clothes, and affecting the city business air, telling of the high wages he is already getting and the still greater things that are in store for him. If the teacher is really to keep the child on the land, he has before him the very difficult task (which he may perhaps only half-heartedly undertake) of convincing the child that twenty shillings in the country is equal to forty shillings in the city. This introduces another aspect of the question and shows that our educational system must lessen the disparity between the wage-earning power of the country man and that of the city man. During the period when our elementary education system was evolved, we had a number of years of severe agricultural depression. This reacted on our educational methods, and the object, or at least the result, was to train the boy to be a clerk in the city, but not to be a worker in the country. The teaching was didactic, it furnished the boy with useful facts and a facility for manipulating words and figures, but it did not help him in dealing with things; in consequence, such a boy did fairly well in the city, but very indifferently in the country; when he left school he knew nothing that was any use and he had never acquired habits of observation or thought.

The result was that education became highly unpopular among our farmers. They had to bear much of the cost of it, for education is largely paid for by a rate levied in the district, altho, of course, the state makes a

contribution, and they had the mortification of finding that the young men who had been thru the school were not only no better than their fathers, but were not even as good. Even today our keenest observers are probably our old shepherds and ploughmen, while very few of our young men are equal to their fathers or their grandfathers in manual dexterity and ability to perform such country arts as hedging, ditching, thatching, etc. So unpopular, in fact, did rural schools become that it was realized that a change must be made in the system: if the child was to be kept at school at a time when he was most receptive, he ought to have at least as good a training as the child who was brought up by his father on the farm. Educationalists also began to realize that it was unsound to make the children purely passive receivers while the teacher was the only active instrument. And finally, a few reformers pointed out what a loss it was for children to sit in a classroom poring over artificial books that were out of date almost as soon as they were written, while the great book of Nature lay open outside, ever fresh and true and never out of date.

The great change came about thru the remarkable extension of gardening that has taken place in England of recent years. This fact is attested by all observers, and is revealed also by the great florist and seedman's trade that has now sprung up, and in the demand for a new type of house with a garden laid round it, and in the rapid development of our garden cities. Provision was early made by which laborers and workingmen could obtain plots of land—allotments—on payment of a low rent—$2.00 or $3.00 a year for a large patch—on which to grow their vegetables and flowers. Presently the schools began to get their gardens, and when the state made a special contribution of four shillings per annum for each child toward the cost of the garden, the idea began to spread, and now the school garden is fast becoming a very popular institution.

Having now introduced the school garden, the next thing was to make it the center round which the education should develop. This was not quite a straightforward task because it was essential that the garden should succeed as a garden. The trouble is that our laborers and allotment-holders—especially the older men —are very good gardeners themselves, and are extremely critical when other people set up a garden. So long as the teacher keeps to books, the laborers have no way of measuring him up, but directly he takes to gardening, he embarks on a business with which all the workingmen of the village are familiar, and in which they will be competent and ready to criticize all his efforts. If the garden succeeds, the teacher wins the respect of the villagers; if it fails, the respect is qualified and the verdict of the village is that he may be a clever man, but he is no gardener. Forthwith the school garden loses its hold on the parents and children. Now every teacher knows how difficult his task becomes when the parents scoff at his apparatus, and when you further remember that our teachers are subject to a certain amount of local control as well as to the

local public opinion, you will see how necessary it is that they should not incur the unfavorable criticism of the village gardeners.

In trying to make the garden the center for the educational work of the school, the teacher has had this wholly extraneous condition imposed upon him by public opinion—the necessity for making his garden satisfy the gardening critic. This has reacted in two ways. It makes the children very keen indeed. They want the garden to look well and to be as good as any in the village. But there is also the temptation for the teacher to do too much of the work himself—this is not good. But the great disadvantage is the tendency for the garden to become a place for growing good vegetables rather than a place for educating the children—it becomes a market garden instead of an educational laboratory.

It is of course possible to reconcile these ends, but to do so requires a good deal more from the teacher than if he had only one object before him. In many cases the teacher has not been trained to do the work; he has been brought up to consult books rather than to handle things, to believe the printed page rather than the evidence of the senses. He has been in the habit of regarding the child as a recipient of knowledge—not always a very willing or a very passive recipient perhaps—and he is not prepared to change his view at once and let the child become an active seeker after knowledge. Fortunately our teachers are a very fine body of men and women, pervaded with the true professional spirit, and once they see the advantage of a new method, they take it up enthusiastically. And the chief reason for the success of the school garden has been that it has the whole-hearted support of the teacher.

There are two general methods of utilizing the school garden. The teaching may be wholly didactic—the child being told what to do and what will happen—or it may be wholly experimental—the child setting out to discover truth for himself. The second method is admirable in principle, but very difficult in practice. Those of us who spend our days experimenting know how extremely difficult it is to ascertain even the simplest fact with which we were not previously acquainted. In walking one day with my little boy, we picked up a fir cone and he asked me what it was. Being a believer in the experimental system, I got him to plant it in his garden to see what would happen. In due time up came a potato, and he drew the perfectly legitimate conclusion (according to the experiment) that fir cones gave rise to potatoes. Prima facie the experiment was good, in reality it was bad.

I know of no more difficult exercise even for the trained scientist than to devise an experiment that shall give a perfectly definite answer to a simple question. So often some complicating factor intervenes: the experiment doesn't turn out as was expected and the teacher has to explain the result—sometimes to explain it away. Now this is one of the worst of bad mental habits.

Probably the most satisfactory course is a judicious combination of the experimental and didactic methods. As the teaching has to be strictly in relation to the child's environment, it is necessary to make full use of local material. But as the teacher is preoccupied in his so many other tasks, it would be unreasonable to expect him to make out a course for himself without guidance. We are therefore adopting three methods: (1) Our Cambridge University Press is publishing a series of nature-study readers, each on a single definite aspect of nature, written by experts and containing simple experiments and notes for observations. (2) Our agricultural colleges are arranging summer courses for teachers, dealing with the natural history of the locality. (3) Young teachers still at college may have a third year's course on nature-study. This last is not very popular. But the summer courses are, and they are doing much to make our school gardens the center of the educational work of the school.

In an English village, as I hope I have made it clear, a teacher has by no means a simple task. If he succeeds, he is not unfrequently tempted away to the town by a higher salary and by better chances of promotion. Indeed the operation of economic forces would tend to draw the best men and women away from the country schools, and leave them to be staffed on the principle of the survival of the unfittest, but fortunately economic forces do not entirely dominate the situation. It ought to be recognized everywhere, however, that the country teacher may serve the community just as well as the town teacher, and deserves just as great a chance of promotion and as good an opportunity of making the best of his life. If this is not done, the teacher may not accept country life permanently unless he is obliged to do so. The essence of the newer methods of teaching is to draw out the best that is in the child and make the best of the faculties it possesses. This can be done only by a teacher who is himself a person of distinction and individuality, and the community must be prepared to offer adequate inducements for such persons to enter the profession. Perhaps I ought to apologize for mentioning financial matters at a gathering of distinguished educationalists, but I remember I am in Chicago, where such matters may permissibly be mentioned. What I want to say is this: we often notice a great willingness to spend money on buildings, on apparatus, and on schemes. But I venture to think this is the wrong end. No building or scheme will be of any use unless the right man or the right woman works it. Let us but have a good teacher, and all the rest follows as the day follows the night. Let the authorities attract good men and good women into the profession; give them a free hand and a generous remuneration; and I believe the problem of school education in country districts will be solved. Such a teacher will make a study of the children, their parents, and their surroundings, and will soon know just what common objects of the country will best serve the purposes of education. A teacher in full sympathy with country life will need no

scheme; he will select his material from whatever interests him or his scholars most. It is a significant fact that our best results are obtained where the largest measure of liberty is allowed to the teachers.

I have dwelt at great length on the elementary school, because experience shows that here the problem is most important. If only the elementary teaching has been right the higher grades present no serious difficulty.

After the elementary school days are passed, the boys become sorted into two classes: those who must go to work, and those who are either clever enough or sufficiently well off to go to college. The latter need not now concern us, they are numerically in a minority and our facilities do not present any special or novel features. The boy who has to leave to go to work presents a more serious problem. For physiological reasons, it is necessary that a boy should have abundance of physical exercise during the important period between the ages of thirteen and seventeen. He can get this on a farm. He can also train his powers of observation and acquire a newer and broader outlook on life. There would seem to be no valid reason against his leaving school early if provision is made for his further education. This must be on strictly scientific lines, i.e., the boy must be trained to observe and to think and to feel his place as a member of a community with great responsibilities. But while our aims must be high, we must not lose our bearings; we must remember that a boy is essentially utilitarian in his outlook and he has to earn his living. In providing the mental training, the teacher must therefore use the common knowledge and experience of the best type of countryman and must draw on the new knowledge that is being gathered at the various experimental stations. Naturally the teacher cannot do this without guidance, and here again our Cambridge University Press has come to the teachers' aid. This subsequent education is sometimes arranged at night schools and sometimes at winter schools; the latter is so much the better arrangement that provision is now being made for considerable extension.

When the young man is taking a large part in the direction of the farm, it becomes necessary to give him a much more frankly agricultural instruction. This is being done by itinerant instructors, by market-day lectures, by short courses at the colleges on special subjects, by inspection of the farms and allotments, and by demonstration plots. The success or failure of these various schemes is profoundly affected by the attitude of the village teacher; a keen, energetic teacher who has got a hold on the village community is the best agent the special lecturer or instructor can have in our country. Only the best types of men, however, are of any use for this kind of instruction: our farming is very highly specialized and our farmers are extremely capable, the poor ones being speedily crowded out. Again, therefore, the problem reduces itself to finding good men and women, people with sufficient intelligence to see what is wanted, sufficient personality

to get their views accepted, and sufficient energy to get their program carried out. So long as such people are forthcoming, the rural problem need present no insuperable difficulty.

THE BEST NEXT THING FOR THE TEACHING PROFESSION

ALBERT E. WINSHIP, EDITOR OF "JOURNAL OF EDUCATION," BOSTON, MASS.

It would be easy to name many good next things professionally, to name the best next things in devices, in methods, in discipline, in equipment, in administration, and in philosophy; that is, the best from one man's point of view. None of these is the most vital. They may be important, but they are not dominant.

Isn't it time that the National Education Association grapples with the biggest issues, with those that are at the same time the most extensive and intensive? No one ever hits a target who does not aim above it, and the farther away it is the higher above it one must aim. Why should not this meeting of the National Education Association in its closing moments here highly resolve that education shall become the leading American profession?

New times demand new men and new measures. The new times are surely here. The profession that meets the demand of these times will be the leading American profession. Education can meet these demands better than law, medicine, or the ministry. It is more likely to meet them.

Law, once the most eminent of the professions, will not meet the demand of the new times with a mission and message for the ennoblement of humanity, unless it ceases to win its greatest triumphs in finding legal trapdoors thru which the guilty can escape justice.

Medicine is not likely to meet the new demand until it ceases to think it more professional to kill a patient regularly than to have him restored to health irregularly. Health, not regularity, must be the professional aim.

The coast is clear. Education can be the leading profession of the century. Education is the only profession that can devote itself exclusively to the making of manly men and womanly women. Education is the only profession that can lead the present generation to virtue, integrity, and nobility thru the influence of childhood. In the long ago it was said, "A little child shall lead" us into the millenium, and education can compass that highest of achievements.

Education was the first profession; why may it not be the greatest? It is the only learned profession whose leaders in scholarship have been called professors; and the one man who met all the needs of the times, the greatest of all men, was the Great Teacher, the founder of the profession of education. But if education is to be the leading American profession, the profession of the century, there must be from the bottom to the top a complete transformation. If the teacher is to lead the preacher, the physician, and the lawyer in the professional race, there must be a transfiguration.

In three respects, from the lowest to the highest, there must be a new birth. We must think in larger units than they; we must be more dominant and less domineering; we must rise above self-consciousness and class-consciousness, and be more subconsciously dominant than they.

We shall be measured by the size of the units with which we measure. A pencil may be measured in inches, a door in feet, a room in yards, a field in rods, but distances must be measured in miles or furlongs. He who would give the dimensions of a field in inches needs no other judgment as to his size. The teachers must cease to measure a boy by any one act, even for the moment, by the mechanics of spelling, by the facts of the text.

Some of us can remember when it was an educational crime not to do well everything assigned in school, and more of a crime to do anything, however well, that was not assigned in school. A million boys have been thrashed for not knowing things not worth knowing, and another million for doing something well worth doing. All this must go—must go completely—and we must measure things, in school and out, by units large enough to see the whole boy and his whole life. We must see him as he is and as he is to be.

If education is to be the profession of the century, it must be dominant and not domineering. This will indeed be a great transformation, a transfiguration.

The law of dominance, as discovered by Mendell fifty years ago and rediscovered and magnified by De Vries fifteen years ago, is as true in the intellectual and moral world as in the physical. If from two well-established families of guinea-pigs, one rough-coated and one smooth, you mate one from each, the four offspring will be rough-coated. That is dominant. But if you mate two of these rough-coated offspring, three will be rough-coated and one smooth. The recessive quality in the second generation is one-fourth the dominant, but thereafter it will appear so rarely that it will soon disappear entirely.

No one, not even the parent as a rule, has such an opportunity to dominate a child's life as the teacher. The great mission of the school is to dominate the child's thought, motive, and spirit. A graduate of a university recently said:

> One professor in one semester did more for me than all the others combined. Under him I found myself. I can think with a purpose and have a motive in life.

Unfortunately the tendency has been to domineer rather than dominate. The ideal of obedience, of regulating the knowledge and the thinking of every child by the teacher's predilection and the professional traditions, has led too often to a domineering spirit. Dominance is good, domineering is bad. Dominance is a divine attribute, domineering is the characteristic of his Satanic majesty.

In one town of less than one thousand inhabitants in western New York

was a hotel proprietor who was the master-mind of the village. He dominated the youth of the place in an effective and wholesome way. Today six of the best hotels west of the Mississippi River, as good hotels as there are in America, are managed by boys of that little settlement. So far as is known only one other boy attained even moderate prominence because of the dominance of teachers or preacher, of lawyer or physician.

A few years ago a serving woman in West Chester, Pa., died, and at her funeral were five eminent men—brothers—one from the Harvard faculty, one from a theological seminary faculty, one from an eminent pulpit, one from fame in medicine, one with the wealth of a banker. One of them conducted the service, two others took part therein. It was the most distinguished funeral service ever held in that city. They said that faithful family servant had dominated their boyhood life so wholesomely that they could but turn aside from their honors and opportunities of life to pay this tribute to a worthy humble woman.

Think of the opportunities that come to a half-million teachers every year! Education must dominate if it is to be a noble profession, and it is an entirely easy matter if rightly approached.

Finally, our units of thought and our dominance must rise above self-consciousness and class-consciousness and must react upon the subconsciousness of individuals and communities, of industry and commerce, of civic and religious life. This will be exceedingly difficult of achievement. The relation of the teacher to the pupils on the one hand, and to supervisors, school boards, and the public on the other, makes self-consciousness almost inevitable. Teachers have suffered so long from injustice that there seems to be no way to right the wrongs except thru class-consciousness. The superintendents, the kindergartners, the music teachers, the drawing teachers, the normal training teachers, the sewing teachers, the cooking teachers, the physical training teachers, the teachers of Latin, of German, of French, and of mathematics, and now the grade teachers, the women teachers, and the men teachers are all flocking by themselves, hoping to gain something or retain something by the development of class-consciousness, but there will be no achievement until everybody is more a teacher of boys and girls than of any pet subject. Some men have been scared into an effort to set the boys off by themselves in the hope that they can develop a male class-consciousness that will make it impossible for a female camel to get her nose into that tent.

What all teachers need, what must be, if education is to come to the head instead of staying at the foot of the profession, is a uniform and universal effort to dominate the subconsciousness of everybody. There is a subconscious purpose to provide good school buildings in cities. It is no longer necessary to campaign for new school buildings. There is coming to be a subconscious right attitude toward salaries, tenure, and pensions in progressive cities.

Let the good work go nobly forward among ourselves and with the public until all teachers think in large units, until education dominates the subconscious life of pupils and the public, then education will be the greatest of professions.

PEACE AND ARBITRATION

BARONESS BERTHA VON SUTTNER, VIENNA, AUSTRIA

I should like to ask the question whether education is merely or especially a matter of schools and universities and has to deal only with childhood and youth. It seems to me that education must be continuous and that the greatest educators are life and experience. Every grown man or woman who wishes to deal with one of the great problems of the time must practically and unceasingly educate himself or herself in order to grasp its multifarious aspects. And since every progress consists in the victory of a new thought over old prejudices, it cannot be thru the knowledge of past facts and data, laid down by former generations into textbooks, that the new ethical and political and social systems can vanquish the old ones.

But there is one thing that in modern times can be taught and is being taught to our young, namely, that the world is moving onward and upward; and that therefore the student mind must be prepared to open to the new lights which are continually breaking forth from life and science. This domain is the future and it has hitherto been a great error of educational systems to nurture a sort of idolatry for the past, as if all wisdom, all heroism, all religion had attained perfection in the foregone centuries. I do not speak of America, which is young itself and which forecasts all its ideals into the future. I speak of the educational systems in my country which breed the adoration of the past, the conservation of the present, and the dread of everything that is new.

You know that the subject of my discourse is universal peace and that certainly is a question of the coming times, for the old war system is still in force in our days, in spite of the fact that the ideals of peace have already been introduced into practice by existing institutions. I mean the Hague conferences, the arbitration treaties, etc. On this field appears most conspicuously the difference between the spirit that reigns in your American educational practice and the spirit prevailing in the schools of middle Europe.

With great gratification I see that in your programs the peace movement with its history, its principles, and its aims has been given a broad place, that contests and prizes on the subject are introduced into the schoolplay and that Peace Day is celebrated in the schools and cosmopolitan clubs founded in the universities.

In our country it would be out of the question; no such thing exists.

There, the instruction of youth is entirely based on the military régime. The widest space in history is given to the description of battles and the glorification of warriors; the whole system tends to the training of obedient servants to the throne, the altar, and the army—a narrow-minded patriotism consisting of pride in the armed world-power of one's own nation, and the contempt of other nations, and unquestioning readiness to fight at the first sign of the war-lord and to sacrifice any sums for the demands of the war department. Such is the highest virtue which the official school methods tend to implant in the mind of the growing generation.

Lately rifle shooting has been introduced in our schools. The Austrian minister of public instruction visited a college to assist in the shooting exercises of the boys and pathetically expressed his satisfaction thus:

> I am very glad to see that in spite of the protestations of some mothers and some masters, the healthy and useful branch of rifle shooting has been introduced into the school plan: but do not think, my boys, that this merely means healthy exercise or the acquisition of dexterity. You must look higher, you must elevate your thoughts to the ideal aim of which you never must lose sight, the aim to defend your fatherland at the call of our most high sovereign to whom you must ever be ready to sacrifice your goods and your blood.

If one approaches such a high functionary with the proposal to prepare youth for the new order of things which, thru the Hague Tribunal, the arbitration treaties, and the common demands of democracy shall be able to avert the dangers of war, then they will answer you:

> In our seriously conducted institutions there is no room for such dreams. Nay, we consider it as dangerous to the necessary military spirit and patriotic feelings that such Utopian matters should be mentioned in the schools.

Now see the difference: last year your Secretary of the Interior issued a circular recommending that all the teachers of the state should be supplied with programs for the celebration of May 18, Peace Day, and in this edict the statesman said:

> Whatever we want to have in the nation for tomorrow, we must put into the schools of today, these workshops of humanity. Among the many movements of modern times for the advancement of civilization and the relief of humanity from unnecessary burdens of expenditure and paralyzing fear, none is more significant than that for arbitration and world-wide peace.

So here, the fundamental principles of peace are fully recognized as that which is wanted in the nation of tomorrow, and I deeply rejoice to find it so. It corroborates my confident hope that these feelings and these methods of the New World will spread and conquer the ancient traditions and stagnant spirit of the Old World. Do not reproach me for lacking in patriotism in bringing before you accusations of my own country. It is love for my country and for humanity which spurs me to confide to you my bitter grief and to tell you the wretched truth. You must know how things stand in middle Europe and then you will be more eager to help us with your example and with your acts. You must send

peace emissaries across the sea from your universities to ours; you must try to missionize our youth and our teachers. If you could but realize it, this is necessary to you in self-defense. The interrelation of the nations is now so close that the progress which is attained in one country must modify the others or nothing is permanently gained.

The danger of expansion of the war spirit in Europe is so intense at the present hour that if it is not counteracted a general conflagration of the whole mass may be expected and would retard even your civilization.

In all the civic and social complications with which you are wrestling in this country, you are handicapped by mid-European problems and vices. The educational body today is forced to confront most of the social and economic questions.

The child without the breakfast is the doorway into a vista of social wrongs. We may procure his breakfast for him—but we hesitate to open the doors even for a glimpse. In our informed imagination we catch the swift picture of the sweatshop, the impossible tenement, with its child laborers of delinquents, starvelings, degenerates, tuberculosis, helpless motherhood, the shop girl, the white slave, and so on *ad infinitum*. Without discussing the remedies, let me ask what is the cause, the farthest-lying cause? In Europe mother and child have for centuries labored while war and army demands father and son. Some of our oldest architecture proves that the sunless tenement has long been occupied by the impossible poor; also it was a sort of communal defense in time of attack. The white slave and the illegitimate are a war-evil in a military nation.

In a nutshell: these problems have been the creation of militarism and sent to you full-fledged by the shipload, and in your country with a federal government spending 70 per cent of its income for war measures you are not financially competent to cope with these important problems. Your purse strings are pulled by the armament trust first and not by the educator and conservationist.

I give these suggestions knowing after all that your educator, in the last analysis, is the agency which shall solve these complications, as he teaches history, social science, physiology, and the rest.

And now to return to the narrower confines of my theme, peace and its relationship to the teaching of the young, I should say:

Teach them the high faith in the right.

Teach them to stand by this faith when they vote some day.

Teach them that your federation does not stand alone for justice to each other, but for justice to every other.

Teach them the ideal of the brotherhood of the world from ocean to ocean, thru the great canals, across the Pacific Isles, into the heart of the colored races. Teach it as a standard and example to every other power. Teach them that the ideal of their nation is not to give history another

"world-power" to overshadow the rest, but to be a nation brave enough to unfold universal brotherhood, the final religion, to all the rest.

Teach them the courage to refuse to be conquerors.

Teach them good will to every race and tongue.

Teach them to aim to keep their nation as the leader for movements for righteousness and peace among men.

Teach them that pure patriotism means world-welfare.

Teach them that the greatest protection to their nation is in its moral courage.

Teach them that good will is a stronger protection than armies and navies.

Give them the vision of a united congress of all states, working for a new international federation, and international ethical co-operation.

Teach your youth that they are the real Peace League of the present and of the future; that upon them as an army, not of scouts, but of lovers, the future ideal of this race and all races depends.

Teach them to be interpatriotic, international, interracial.

And while you teach these all-consuming ideals to your boys and girls, you must watch that you do not co-operate with the enemy without knowing it.

Oppose all legislation which appropriates your money for armaments instead of development.

Oppose the fortifying of your great seaports and your canal which are destined to be the bridge between the races.

Oppose all plans to put rifles into your schools.

Awake from the illusion that the Boy Scouts movement is for manly development and character. It was designed by great war captains as the forerunner of conscription to make it easy for your boys to be forced into the army.

Question closely your military schools and your Red Cross movement.

Know that the gun merchants are lobbying to sell their wares for sheer profit and are always busy in working up scares to rush thru the appropriations they covet.

And now in closing, let me say to my fellow-workers this:

The explorations of the astronomer have already given us the hope of the interworld relationships—relationships which we can never hope to enjoy save thru our science-illuminated vision.

But we know that the same law of harmony which controls the cosmos also controls our social progress. We must unfold for our local star, this sphere, the glory and the realization of the interpax ideal for every atom of humanity.

CAMP FIRE GIRLS

GERDA SEBBELOV, GENERAL SECRETARY OF THE CAMP FIRE GIRLS, NEW YORK, N.Y.

The most decided intellectual progress often comes after long deliberation in close contact with nature. Sitting alone on a rugged mountain in the quiet of the night while running rivers, washing waves, and wild animals' steps form part of silence itself; out at sea with miles and miles of curious-shaped icebergs tinted by the midnight sun which rests like a large red balloon on the surface of the ocean; on long sleigh drives with a dog-team over ice fields and snow; or alone with a horse across the prairies—at such times life seems vaster, and strong resolutions come unbidden.

Men spend a good deal of time boating, hunting, riding—being alone with Nature. With girls it is different. In the Western High School in Washington, last year, two hundred and seventy-four dollars were solicited by the girls and boys to be used for out-of-door sports. There are more girls than boys in the Western High School and always the girls seem to be more successful in their efforts to secure funds. When the year was over, the principal looked into their accounts and found that two dollars out of two hundred and seventy-four had been used on the girls. A committee was then appointed whose duty it was to find ways and means of spending money on girls. Now, there are fifteen Camp Fires in the Western High School and more to be formed. I have no doubt that other schools in the United States which want to spend money advantageously on their girls will find the Camp Fire movement a convenient aid.

Groups of Camp Fire Girls hold meetings every week at which they work together to achieve experience in such things as will make them intellectually, physically, and spiritually strong and independent. The monthly meeting is beautiful. At this the girls meet in ceremonial dresses, around an open fire, out of doors, if possible; receive recognition for whatever they have achieved, and learn to laugh together and enjoy. At all meetings, a woman over twenty-one years of age is leader and planner. She is called Guardian of the Fire, and has the privilege of giving her experiences of life to the girls and helping shape the elastic material of young souls.

When a girl wants to join a group of Camp Fire Girls, she must know and understand the Law of the Camp Fire. She comes before the fire at the monthly meeting and says:

It is my desire to become a Camp Fire Girl, and to obey the Law of the Camp Fire, which is

Seek beauty
Give service
Pursue knowledge
Be trustworthy
Hold on to health
Glorify work
Be happy

This Law of the Camp Fire I will strive to follow.

Then she is a Camp Fire Girl and will always stand for the ideals of the organization.

To attain the second degree of Fire-Maker, a girl must have fulfilled fourteen definite requirements including such demands as to prepare and serve two meals at the weekly meetings, to hem a dish towel, darn a pair of stockings, know the causes of infant mortality and to what extent it has been reduced in one American community, know what a girl of her age should know about herself, tie a square knot, sleep with open windows, and learn a poem of not less than twenty-five lines in length. She must also present twenty elective honors won from out the seven crafts suggested in the handbook: health craft, home craft, nature lore, camp craft, hand craft, business, and patriotism. She must have perfected herself in experiences that bring health and efficiency. Once again she comes to the fire at the monthly meeting and expresses her desire to bring out her individual attainment for the good of the community, saying:

As fuel is brought to the fire
So I purpose to bring
My strength
My ambition
My heart's desire
My joy
And my sorrow
To the fire
Of humankind
For I will tend
As my fathers have tended
And my father's fathers
Since time began
The fire that is called
The love of man for man
The love of man for God

To gain the third rank of Torch-Bearer, the girl must be a leader. She must have developed herself personally and desire to use her development for the good of many. She must actually show thru leadership that she is able to help others attain; and thru the attainment of others is she judged. It is not driving, it is leading that we demand of our Torch-Bearer. Individually she must be known to her Guardian as happy, unselfish, and a good leader, a good team-worker, and well liked by the girls. She shall present fifteen elective honors, one from each of the seven crafts. Once more she steps up to the Fire and expresses her desire to lead by saying:

That light which has been given to me,
I desire to pass undimmed to others.

Then she is a Torch-Bearer, a help to the Guardian, and herself a leader.

Camp Fire Girls dress reasonably, simply, and beautifully. To put upon the market such things as Camp Fire Girls would want to wear, the

Camp Fire Outfitting Company has come into existence. It furnishes the plain blouse with sleeve emblems of different ranks; a skirt, buttoned all the way down the front and back and with a large pocket (for "Camp Fire Girls have pockets"; they do not carry unnecessary, unessential things in their hands, but put them in their pockets and have their hands free for work in the world); practical bloomers for camping and hiking; a plain, beautiful hat; ceremonial Indian dress; and all the insignia of the different ranks: a pin, a bracelet, and a ring. The Torch-Bearer's pin is round and divided into four sections standing for the four seasons of the year. In the one is the rising sun, in a second, clouds and lightning, and in a third, the standing pine which is the individual symbol of the Camp Fire Girls, standing for simplicity and strength. The whole pin means that thruout the seasons, in sunshine and storm, the Camp Fire Girl is sturdy and strong, as the standing pine.

The Fire-Maker's bracelet is engraved with our watchword, "Wohelo." The Wood-Gatherer's ring—I mention this last because it is most important (it signifies membership in the organization)—is given to each girl as she joins. On it is a bundle of faggots, standing for the seven points of the Camp Fire Law. The faggots are part of the pine, the individual symbol. With the ring goes a little poem, teaching the significance of membership in one large body with one high ideal:

As faggots are brought from the forest
Firmly held by the sinews which bind them,
So cleave to these others, your sisters,
Whenever, wherever you find them.

Be strong as the faggots are sturdy;
Be true to your deepest desire;
Be true to the truth that is in you;
And—follow the Law of the Fire.

That means individual development for co-operation and team-work.

THE CAMP FIRE GIRLS AND THE NEW RELATION OF WOMEN TO THE WORLD

LUTHER HALSEY GULICK, DIRECTOR OF THE DEPARTMENT OF CHILD HYGIENE OF THE RUSSELL SAGE FOUNDATION, NEW YORK CITY, N.Y.

It is my place to sketch the conditions which have created a new relation of women to the world; to show why a nation-wide organization of girls and women is inevitable; and to indicate some of the main results to be secured by such organization.

WORK AND THE HOME

Most of the grandparents of those in this hall lived in homes which were largely sufficient to themselves. That is, the mothers knitted stockings,

wove the cloth for and made the clothing; cooked and served the food, churned the butter, made the bedding, did the washing, prepared for and served guests, cared for the sick, had many children, and—died young. In these homes the men tilled the ground, raised the corn and wheat used for daily bread, made most of their own tools, bred their own cattle and horses, raised their own mutton and wool, built their own houses, made the harness, dug the wells, cleared the fields, and on necessity, fought Indians and English.

SCHOOL

During the brief winter months the children learned such reading, writing, arithmetic, history, and geography as they could, but unless they were destined for law, medicine, or theology, their schooling bore but slight relation to their essential preparation for the great business of the world, namely, living. The boys and girls working in the house and on the field with their parents learned those trades and arts and industries which later on were to be their own chief occupation.

CHARACTER EFFECTS

Significant as was this learning to do by doing, the indirect results of the work were even more valuable than was that material welfare which was the direct object of their daily toil. This most precious indirect effect of daily work consisted of an attitude toward life and toward the world. Work itself became gradually evident as a chief means of attainment, love, and comradeship. The steadily broadening moral shoulders of the boy grew under the stimulus of the increasing load of responsibility which came to him year by year as he worked by his father's side—each helping each to the necessities of life, both physical and spiritual. In this way, responsibility, power, obligation, and love formed the basis of powerful, true character. This was the preparation for life that produced the men and women who in the main created this country.

PRESENT CONDITIONS

The conditions that our children meet today are fundamentally different from the conditions which faced our grandparents when they were children. Steadily, one after another of the occupations, trades, industries, and arts have been taken hold of by the community, organized, and placed upon a basis of effectiveness unimagined in the old days of home manufacture. The beauty of our clothes, the comfort of our dwellings, the variety and quality of our tools, the bewildering world of books, the space-devouring railway, the steel structure business house forty stories high, the great hotel, the bakeshops, specialized farms, schools, churches, theaters, clubs, political parties, universities, world-news, and travel, all proclaim that the humble attainments of the home were but first steps, and that larger and more varied groupings of human beings could attain ends undreamed of in

the olden days. It is not, as so many sadly declare, that the home is degenerating. The splendid truth is that infant activities born and raised in the home are now stepping out into the community. This is no more a cause for regret than is the bursting of the shell when hatching time has come, or spreading one's wings to the air when the time for flight has arrived. The world-experience given by the freedom and power of flying, the great adventure, far surpasses even the beauty, comfort, and safety of the nest.

MAN MADE MODERN CITY

This wonderful new social integration of the world became possible only when man had harnessed power and had invented machines. With power and machines he has done most of the things that most of the people of all the world have done during all the ages. He has thus increased the riches of the world more in one generation than had been accumulated in all time before. This, as I have already said, was done mainly by man and not by woman.

WOMAN'S WORLD CHANGED

The result has been fundamentally to alter the adjustment of woman to the world. In the olden days man, with his weapons, provided food, shelter, and safety. Woman made of them the home—she converted passion into love, domesticated beauty, invented industry, and was the mother of happiness.

Today man has again gone out, this time into the social world, and with his tools and harnessed world-power has again brought back food, shelter, and safety from the primitive dangers—food from the whole world in a new abundance and a surpassing variety, shelter such as was never dreamed of before—and has doubled the average span of life by lessening its dangers.

WOMAN'S NEW WORK

Man has made of his new world a wonderful, a magic place in which to work, in which to make physical attainment. He has not made of it, however, a good nor a beautiful place in which to live. He has made of the community a factory, not a home. In other words, he has not done for the community what woman did to the home.

The world-old power and skill and devotion of woman are again being called for and being given, but now not merely to make and preserve the individual home, but to give to the community those spiritual qualities which she gave to the home.

WOMAN FOLLOWS HER WORK

Woman's work has much of it been taken into the community and out of the individual home. Woman is, therefore, following her work into the community. She is taking on the same kind of responsibility in the community which she has always carried in the home. Many of the psychic

functions of motherhood she is discharging in the school. She is making playgrounds for children, healthier conditions in schools, fairer conditions for the work of men, women, and children in farm, store, factory, shop, and mine. The ideal is that of universal motherhood—all the women being responsible that every child is loved, cared for, and given a fair chance. She is beginning to see that she is responsible for much of the municipal housekeeping, the conditions in the bakeshops and grocery stores. She is concerned that food shall be pure and water clean.

WOMAN AND SOCIAL LIFE

As woman's deepest service in the home is social, so her deepest responsibility is for the relations between people in the community. It is not enough that evil shall be prevented, that every sort of traffic in human bodies and souls shall cease. Human relationships, social life, must come to be in the community so that the deepest desires and hopes and passions of human beings shall lead toward the development of that which is fine—toward life and not toward death. The relations between young people must be so arranged that all the power of sex and the passion of love and desire shall lead toward attainment and growth and beauty and power, and away from death and disease. To make goodness alluring and show the shallowness and stupidity of vice—to bring the qualities and spirit of the home into the community, to embody such ideals in the common habits, the daily life of a people, is such a task, such an opportunity, as has never before been given to the world. Thus are the age-long qualities of women needed in our new world to realize its surpassing possibilities as well as to save it from spiritual disaster.

SEX DIFFERENCES IN SOCIAL RESPONSIBILITY

We often hear these days of the conflict between men and women, of the competition for work on an economic basis, but this is, I believe, a lesser and not a larger fact. We are, of course, all human beings and as such most of our qualities and abilities correspond. We all eat and sleep, and work and play. But we are significant in the world mainly by the extent to which we, as individuals and as groups, differ from each other. My special place in the world is due to my differences, rather than to my likenesses to other people. For example, woman is as sure to have the suffrage as the tide is to rise, not because she is as wise, as strong, as skillful as man is, nor because she, like him, is a human being, nor for any other reason of likeness or duplication at all, but because she is different, because she can do what he cannot, because the world needs her peculiar and special abilities. It is because she is different, because these differences are fundamental world-needs, that it is necessary that she shall bring these differences to the service of the world. This fact, whether woman wants it or no, the suffrage will force inevitably upon her. Woman has been respon-

sible for the home—so she had her voice. Now she has thrust upon her a new, terrible, and glorious responsibility and opportunity, for the home and social aspects of the community. We insist that she must speak, but because she is different and not because she is like. The vote is no end in itself. To serve the community in ways in which she is the creator and specialist is the end, and toward this service the women of the civilized world are pressing, most of them unconsciously—a few of them consciously, but all of them inevitably.

WORK AS DISCIPLINE TODAY

The first and most profound respect in which the new world needs creative service is in the preparation which the community gives to children for the business of living in this new world. We are many of us distressed by the lack of responsibility which so many children show—their failure to understand and yield to the deeper needs of work and its place in life. This deeper moral equipment for life in the old days was associated with the faithful performance of the daily work in the home and the deep lessons which were learned by working alongside of the parents.

MANUAL ARTS

We have thought, however, that these lessons lay in the specific work done—so we have organized the elements of the work with tools into manual training, we have developed, systematized, organized, and pedagogicalized cooking and sewing into domestic science and domestic art (how prim and strange they do look in their new clothes), and we have put courses in these subjects into our schools. From two to four hours of laboratory work per week has taken the place of from six to twelve hours a day of real work with a real mother doing real work for real people in a real home. The result is that our children know more about the use of tools and the physics and chemistry of cooking and the art of sewing than did our grandmothers. And we are only just beginning to realize that learning how to do work in no respect has the character effect of doing work, and that being taught is one thing, and working with is another, and that knowing how, and having responsibility for, are all different in their effects upon life.

SOCIAL FUNCTION OF WORK

About cooking, for example, have grown most of the social feelings and customs of the family. To break bread or to eat salt together is a social fact far deeper in significance than is the knowledge of physics and chemistry involved in the cooking. To know cooking in its social sense—which is its important sense to all of us who are not to be cooks—is to have developed the art of human social intercourse and relationships. It is to make the body feed the soul. The college girl gets her chafing dish, not because she is hungry, but to feed her soul with the charm of comradeship.

I am not trying to say that the science of cooking is unimportant—but that alone it is mechanical. It and the whole family of sciences that can be taught and practiced in school do not furnish us with the equivalent in equipment for life that was found in the actual work of the home a century ago. Nor does it in any way equip the child with the newer social feelings and sense that are demanded of the adult in a modern community.

This is a rapid, tho I trust not superficial, sketch of the present world affairs as regards woman. To meet the new and larger responsibilities it is necessary that she shall:

1. Continue in her learning to do teamwork. To bring about home conditions of beauty, comfort, health, social happiness, and wholesomeness in the community means the very highest order of mutual loyalty and of teamwork. This is a new demand upon woman.

2. It is necessary that the consciousness of dignity, romance, and beauty be again restored to daily work, that it may once more take the fundamental place in the training of strong, true character.

3. The psychic relations between daughters and mothers have been hurt by those forces which have lessened their working together. These relations between mothers and daughters are not only to be brought back, but to be deepened and rendered more beautiful.

4. And last, and most important and most difficult, the nature of true social relations is to be so revealed that it is evident that the adventure, romance, and happiness are to be found in those human relationships which are found on the broad roads of life and work, rather than in its fenced-off sloughs and deserts.

The deepest need of woman is the need of being needed. This is why she responds to the sick or crippled child. If ever woman was needed, it is today. The very riot of our material riches is the peril of our souls. Woman is already taking hold of the present material world, giving to it and bringing into it the love and service and spiritual relations which in the old days created the home and which today are changing the man-made workhouse into a place adequate to the glorious future life of human beings.

The Camp Fire Girls is an organization which aims to bring the power of organization and the charm of romance again into the humble acts and needs of daily life. It is a deliberate attempt to help meet the new and splendid social world which is before us.

DEPARTMENT OF SUPERINTENDENCE

ST. LOUIS MEETING, FEBRUARY 27–29, 1912

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION—TUESDAY, FEBRUARY 27, 1912

The Department of Superintendence of the National Education Association met in the Banquet Hall of the Planters Hotel, St. Louis, Mo., at 9:30 A.M., President Charles E. Chadsey, superintendent of schools, Denver, Colo., presiding.

The meeting was opened with an address of welcome by Rhodes E. Cave, president of the Board of Education, St. Louis, Mo.

Before taking up the program for the morning, President Chadsey made announcement of the following appointments:

COMMITTEE ON NOMINATIONS

Ellis U. Graff, superintendent of schools, Omaha, Nebr.
Walter E. Ranger, state commissioner of public schools, Providence, R.I.
Ada Van Stone Harris, assistant superintendent of schools, Richmond, Va.
Otis E. Hall, superintendent of Montgomery County schools, Crawfordsville, Ind.
W. T. Carrington, president of State Normal School, Springfield, Mo.

COMMITTEE ON RESOLUTIONS

Francis G. Blair, state superintendent of public instruction, Springfield, Ill.
Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.
Bruce M. Watson, superintendent of schools, Spokane, Wash.
Charles S. Clark, superintendent of schools, Somerville, Mass.
M. E. Pearson, superintendent of schools, Kansas City, Kans.

The program for this first session was as follows:

Topic: Organization Affecting the Course of Study and Economy of Time

1. "Waste and Efficiency in School Studies"—W. H. Elson, superintendent of schools, Cleveland, Ohio.
2. "Departmental Teaching in the Elementary Grades"—W. L. Stephens, superintendent of schools, Lincoln, Nebr.
3. "The Child versus Promotion Machinery"—D. E. Phillips, president of Board of Education, Denver, Colo.
4. "Some Adjustments and Changes in the Course of Study and School Organization Suggested by the Needs and the Capacities of Children That Vary from the Standards Set for Average Pupils"—D. H. Christensen, superintendent of schools, Salt Lake City, Utah.
5. "The Junior High School: A New Plan of School Organization"—J. H. Francis, superintendent of schools, Los Angeles, Cal.

AFTERNOON SESSION

The meeting was called to order at 2:30 P.M. in the Planters Hotel Banquet Hall by President Chadsey, and the program was presented as follows:

Topic: The Determining of School Efficiency

1. "The Value of the Educational Commission in Determining the Efficiency of a City School System"—Calvin N. Kendall, commissioner of education for New Jersey, Trenton, N.J.

2. "The Relation of the Urban Community to Its School System"—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

3. "How May a City Best Determine Its Unmet Educational Needs?"—W. H. Allen, director of the Bureau of Municipal Research, New York, N.Y.

4. "Quantitative Tests in Education"—George H. Chatfield, secretary of the Permanent Census Board, New York, N.Y.

A discussion of the topic of the session was participated in by W. H. Maxwell, superintendent of public schools, New York, N.Y., F. V. Thompson, assistant superintendent of public schools, Boston, Mass., and W. H. Allen, director of the Bureau of Municipal Research, New York, N.Y.

EVENING SESSION

The evening meeting was held in the Banquet Hall of the Southern Hotel, and was called to order at 8:15 P.M. by President Chadsey. The following addresses were given:

"Ideals and Modern Education"—A. Ross Hill, president of the University of Missouri, Columbia, Mo.

"The Function of the Kindergarten in the American Public-School System"—Lucy Wheelock, Wheelock Kindergarten Training School, Boston, Mass.

SECOND DAY

MORNING SESSION—WEDNESDAY, FEBRUARY 28, 1912

The meeting was called to order by President Chadsey at 9:30 A.M. in the Southern Hotel Banquet Hall.

Previous to the consideration of the program as printed, H. B. Wilson, superintendent of schools, Decatur, Ill., spoke concerning the work of the Committee of the Department on Economy of Time in Elementary and Secondary Education, and presented the following motion:

I move the continuance of this committee for another year, the scope of the committee to be extended to cover the work of secondary schools, as well as that of the elementary schools; said committee to be known as the Committee of the Department of Superintendence on Economy of Time in Elementary and Secondary Education, and said committee to study and investigate with the aim of making a report and recommendations pertaining to the matter of economy of time in elementary and secondary education;

And, that it may be enabled to work on the problem in a thoro and extensive way, I move that this Department request the Council to recommend to the Committee on Investigations and Appropriations the setting apart of $250 to meet the necessary expenses of this committee.

This motion was duly presented and carried.

The following program was then given:

Topic: Problems Relating to Child Welfare

1. "The Duty of Superintendents in the Enforcement of Child Labor Laws"—Owen R. Lovejoy, general secretary of National Child Labor Committee, New York, N.Y.

2. "How Far Shall the Public-School System Care for the Feeble-minded?"—James H. Van Sickle, superintendent of schools, Springfield, Mass.

3. "The City Trade School—An Important Instrumentality for Improving the Vocational Need of the City Child"—Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.

4. "How Should the School System Contribute to an Intelligent Choice of Vocation on the Part of the Pupil?"—George Platt Knox, assistant superintendent of schools, St. Louis, Mo.

5. "The Education of Girls"—L. D. Harvey, president of Stout Institute, Menomonie, Wis.

The annual business meeting followed the morning program, and was called to order by the president at 12 M.

Invitations from various cities desiring the 1913 meeting were first presented. The cities were: Boston, Mass.; Buffalo, N.Y.; Detroit, Mich.; Oklahoma City, Okla.; Palm Beach, Fla.; Philadelphia, Pa.; Richmond, Va.; and Washington, D.C. John W. Cook, president of State Normal School, De Kalb, Ill., and W. L. Stephens, superintendent of schools, Lincoln, Nebr., were appointed tellers. The first ballot resulted as follows: Boston, 15; Buffalo, 106; Detroit, 18; Oklahoma City, 141; Palm Beach, 87; Philadelphia, 150; Richmond, 84; Washington, 3.

Mr. Treasure, of Maryland, moved that the next ballot be confined to the three highest ranking cities. The motion was carried.

Mr. Foulk, of West Virginia, moved that if a third ballot be necessary, it be taken upon the two cities having the largest number of votes. This motion was carried.

Upon the second ballot Philadelphia received 316 votes; Oklahoma City, 195; Buffalo, 82. Philadelphia, having received a majority of the votes cast, was declared chosen as the place of the meeting of the department for 1913.

The report of the Committee on Nominations was presented by Ellis U. Graff, superintendent of schools, Omaha, Nebr., chairman, as follows:

Your Committee on Nominations begs leave to submit the following report:

For *President*—Franklin B. Dyer, superintendent of schools, Cincinnati, Ohio.

For *First Vice-President*—Samuel Hamilton, superintendent of schools of Allegheny County, Pittsburgh, Pa.

For *Second Vice-President*—Mrs. Ellor Carlisle Ripley, assistant superintendent of schools, Boston, Mass.

For *Secretary*—Burr Walter Torreyson, State Department of Education, Little Rock, Ark.

Upon the motion of the chairman the report of the committee was adopted, and the secretary was instructed to cast the unanimous ballot of the department for the persons named for the various positions. The ballot was so cast and the persons named were declared duly elected.

The following report of the Committee on Resolutions was presented by Francis G. Blair, state superintendent of public instruction, Springfield, Ill., chairman:

Your Committee on Resolutions presents the following resolutions, which it considers worthy of the attention and approval of the Department of Superintendence:

1. *Resolved*, That we express our hearty appreciation of the solid, earnest, professional character of the program presented before this, the greatest meeting in the history of the Department.

2. *Resolved*, That this Department recognize the Panama-Pacific International Exposition, to be held in San Francisco in 1915, as a great opportunity to exhibit our educational progress, and that we urge the state, county, and city systems of schools to prepare and to send such of their work as will reveal the development of all phases of education thruout the nation.

3. *Resolved*, That the members of this Department who are charged with the administration of public-school systems welcome and encourage all fair and candid investigation thru commissions or other agencies into the soundness and effectiveness of the policies and methods used and the results obtained, but that we condemn and resent all such investigations whose obvious purposes are to debase the systems or exalt the investigators.

4. *Resolved*, That we approve the work contemplated in the bill now pending in Congress providing for the creation of a Children's Bureau, but that we believe that it can be done more efficiently and economically by the Bureau of Education and that we hereby request Congress to appropriate sufficient funds to the Bureau of Education to enable it to do the work satisfactorily.

5. *Resolved*, further, That this Department of Superintendence of the National Education Association use every honorable means to secure from Congress a recognition of the nation-wide need for a great enlargement of the Bureau of Education, and that we urge Congress to provide the revenue necessary to carry into effect the wise policies recommended by the Commissioner of Education.

6. *Resolved*, That the Committee on Uniform Records and Reports appointed by this Department two years ago be continued in order to aid in the adoption and use of their records and reports by school officers.

7. *Resolved*, That we express our hearty appreciation of the hospitality of St. Louis and the welcome extended to us by the Board of Education and teachers, and that we especially thank Superintendent Ben Blewett for his courtesy and untiring efforts to make this meeting successful, pleasant, and profitable.

Respectfully submitted,

FRANCIS G. BLAIR, *Chairman*
M. E. PEARSON
REED B. TEITRICK
CHARLES S. CLARK
BRUCE M. WATSON
Committee

The report was adopted unanimously.

David B. Johnson, president of Winthrop Normal and Industrial College, Rock Hill, S.C., was next recognized. He presented the following resolution from the National Committee on Agricultural Education, and moved its adoption:

WHEREAS, The Page Bill, or Senate Bill Number Three, introduced by Senator Page in the Senate of the United States, seeks to accomplish the good purposes of the Burkett-Pollard and Dolliver-Davis bills and other good purposes not provided for in those bills, and has now been amended to suit the needs of all the states, and

WHEREAS, It proposes to co-operate with the states in encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools; in preparing teachers for these vocational courses in state colleges of agriculture and the mechanic arts; in maintaining instruction in these vocational subjects in state normal schools; and in maintaining extension departments in state colleges of agriculture and mechanic arts,

Therefore be it resolved, That we indorse the Page Bill, or Senate Bill Number Three, and call upon the members of the United States Senate and House of Representatives to pass it promptly in the best interests of all the people.

Mr. Downing, of New York, moved that the motion be tabled. His motion was carried by *viva voce* vote.

David Felmley, president of the State Normal University, Normal, Ill., presented the following resolution and moved its adoption:

Resolved, That the Department of Superintendence hereby approve the action of the Modern Language Association and of the Illinois State Teachers' Association, in adopting in their publications and correspondence the simplified spellings recommended by the Simplified Spelling Board in its Circular No. 23, and we respectfully petition our National Education Association Board of Directors to adopt at their next meeting the same form of spelling in the publications and correspondence of the National Education Association.

Resolved, That a committee of five be appointed by the chair to present our above petition to the Board of Directors at its next meeting and to use their best endeavor to secure the desired action.

A motion to lay the resolution upon the table was carried by a standing vote of 173 to 128.

E. O. Vaile, of Oak Park, Ill., presented the following resolution and moved its adoption:

Resolved, That as an expression of the Department's appreciation of the action taken by the Modern Language Association, the American Dialect Society, and the American Philological Association, at their late meetings, indorsing the phonetic key alphabet adopted by the Department, February 24, 1911, it is hereby ordered that the resolutions passed by said societies be entered upon our minutes, and a copy of this resolution be sent to the secretary of each.

A motion by Mr. Blair, of Illinois, that the resolution be laid upon the table was passed by *viva voce* vote.

Arthur D. Call, district superintendent of schools, Hartford, Conn., moved as follows:

That the vote of this Department at the Mobile meeting adopting the Universal System of Key Notation be rescinded.

Miss Blake, of New York, moved that Mr. Call's motion be laid upon the table. This motion was lost by a vote of 129 to 150. The previous question was moved and carried. The vote upon Mr. Call's motion was then taken as follows: Affirmative, 154; negative, 93. Mr. Call's motion was declared carried.

The meeting was adjourned by the president without formal motion.

AFTERNOON SESSION

The members of the Department of Superintendence met in round-table conferences, as follows:

(A) ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

Leader—Samuel Hamilton, superintendent of public schools, Allegheny County, Pittsburgh, Pa.

Topic: Agriculture in the Rural School

1. "The Educative Value of the Study of Agriculture"—Earl Barnes, lecturer on educational topics, Philadelphia, Pa.
2. "The Teaching of Agriculture in the Rural Schools: (*a*) To What Extent Can Agriculture Be Taught below the High School? (*b*) What the States Have Done in Teaching Agriculture in Rural Schools"—Philander P. Claxton, United States commissioner of education, Washington, D.C.
3. "The Next Step in Teaching Agriculture in the Rural Schools"—E. C. Bishop, Schools Section, Iowa State College, Ames, Iowa.
4. General discussion, led by Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.; F. L. Keeler, deputy superintendent of public instruction, Lansing, Mich.

(B) ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

Leader—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

1. "Types of Special Schools in the Larger American Cities with Special Courses of Training for Special Groups of Children"—Andrew Edson, associate superintendent of schools, New York, N.Y.
2. "A Definite Propaganda to Impress upon the American Mind the Necessity of an Expansion of the Field of Education to Provide as Ample Facilities for Education by Work and Education by Play as Are Now Provided for Education by Study"—M. G. Brumbaugh, superintendent of schools, Philadelphia, Pa.

The following took part in the discussion of these papers: W. A. Greeson, superintendent of public schools, Grand Rapids, Mich.; J. A. Brooks, superintendent of public schools, Dallas, Tex.; David Snedden, commissioner of education, Boston, Mass.; J. S. Collins, assistant superintendent of public schools, St. Louis, Mo., and N. C. Schaeffer, state superintendent of public instruction, Harrisburg, Pa.

(C) ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

Leader—S. O. Hartwell, superintendent of schools, Kalamazoo, Mich.

1. "Scientific Study of School Work in Arithmetic"—J. T. Giles, superintendent of schools, Marion, Ind. Discussion led by Cliff W. Stone, State Normal School, Farmville, Va.
2. "The Unified High School"—W. A. Brandenburg, superintendent of schools, Oklahoma City, Okla.
3. "Utilization of the School Plant"—William A. Wirt, superintendent of schools, Gary, Ind. Discussion by Harlan Updegraff, Bureau of Education, Washington, D.C., and James G. Riggs, State Normal School, Oswego, N.Y.
4. Brief discussion of other suggested topics.

EVENING SESSION

The meeting was called to order at 8:15 P.M. in the Southern Hotel Banquet Hall by President Chadsey, and the following program was presented:

1. "Vocational Guidance"—Meyer E. Bloomfield, director of Vocational Bureau, Boston, Mass.
2. "America's Most Important Unsolved Educational Problems"—Philander P. Claxton, United States commissioner of education, Washington, D.C.
3. "The Schoolhouse as the Civic and Social Center of the Community"—Edward J. Ward, University of Wisconsin, Madison, Wis.

THIRD DAY

MORNING SESSION—THURSDAY, FEBRUARY 29, 1912

This session took the form of a joint meeting with the National Council of Education and was called to order at 9:30 A.M. in the Southern Hotel Banquet Hall by President Charles H. Keyes of the National Council. The program was given as follows:

1. "Report of Committee on Uniform Records and Reports"—Payson Smith, state superintendent of public schools, Augusta, Me. Discussion by Harlan Updegraff, chief of the division of school administration, Bureau of Education, Washington, D.C.; E. C. Warriner, superintendent of schools, Saginaw, Mich.; S. L. Heeter, superintendent of schools, St. Paul, Minn.; W. H. Elson, superintendent of schools, Cleveland, Ohio. General discussion by Walter E. Ranger, state commissioner of public schools, Providence, R.I.; Calvin N. Kendall, state commissioner of education, Trenton, N.J.
2. "By What Standards or Tests Shall the Efficiency of a School, or System of Schools, Be Measured?"

a) "The Scope and Plan of the Proposed Work of the Committee"—George Drayton Strayer, professor of educational administration, Teachers College, Columbia University, New York, N.Y.

b) "Some Determining Considerations"—James H. Van Sickle, superintendent of schools, Springfield, Mass.

c) "Rural-School Phases of the Problem"—Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.

Discussion by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis; Z. X. Snyder, president of Colorado State Teachers College, Greeley, Colo. General discussion by Charles H. Judd, director of the School of Education, University of Chicago, Chicago, Ill.; Lotus D. Coffman, supervisor of training, State Normal School, Charleston, Ill.; Frederick E. Bolton, director of School of Education, State University of Iowa, Iowa City, Iowa.

AFTERNOON SESSION

The meeting was called to order by President Chadsey at 2:30 P.M. in the Southern Hotel Banquet Hall.

The secretary read an invitation from the President and the Committee of Organization to participate in the Fifteenth International Congress on Hygiene and Demography to be held at Washington, September 23 to 28, 1912. Mr. Cook, of Illinois, moved that the president be instructed to make such appointments as are necessary to satisfy the courtesies of the situation. This motion was carried.

The program was then taken up, as follows:

1. "'The Bookman' in his Relation to the Textbook Problem"—Frank A. Fitzpatrick, manager of the American Book Company, Boston, Mass.
2. "The Effect on Education and Morals of the Moving-Picture Shows"—Joseph R. Fulk, superintendent of schools, Seward, Nebr.
3. "The Standardization of Janitor Service"—G. M. Wilson, superintendent of schools, Connersville, Ind.
4. "Relative Cost of Education of High- and Elementary-School Pupils"—Ernest O. Holland, superintendent of schools, Louisville, Ky.

At the close of the program the meeting adjourned.

HARLAN UPDEGRAFF, *Secretary*

PAPERS AND DISCUSSIONS

ADDRESS OF WELCOME

RHODES E. CAVE, PRESIDENT OF THE BOARD OF EDUCATION, ST. LOUIS, MO.

The heartiest of welcomes is usually the briefest, and as our welcome to you is indeed hearty, so shall I attempt to make it brief. There is an old quotation, no doubt familiar to most of you, but its appropriateness to this occasion is so marked that I cannot refrain from its repetition. It is said that that celebrated old teacher Florus, when asked with what patience he could bear to sit in the schools and teach boys, replied:

> I do not wonder that you are now of this opinion with which I also at one time struggled. For in the last four years I had become so wearied of my occupation that I did not think that a more wretched man lived. But afterward, reviewing and comparing my lot with the fortunes and labors of others, the beauty of the work which I had undertaken at length dawned upon me. Therefore you must know that no kingly power, no praetorship, no honor can be compared with this profession of ours. If the mightiest of emperors were to bestow on me a centurionship it would indeed seem no small honor, if he should grant me a praefectship or a tribunate doubtless it would seem the same; but if, then, not Caesar but Fortune grant me the gift to preside over honorable and generous boys, ought I not seem to you to have attained unto a beautiful and glorious office? For I ask you closely to consider this question, whether it is nobler to command men wearing the military coat or boys clad in the toga praetexta, barbarous and wild hearts or civilized and harmless ones? O, good Jupiter, how regal, how imperial it is to sit upon a raised platform modeling good characters and directing the pursuit of sacred literature.

Such, gentlemen, is the high, the true appreciation of the profession, of the art, of teaching. Such is the spirit which you must embody; such the conception of it with which you must be imbued. Such is the conception of it which we know moves and inspires our own superintendent. And with that spirit, in that feeling, and in that conception of this noble profession, it is an exceeding great pleasure not only to those gathered here, but to all our city, to open gladly our every door to you as the heads of that profession and to welcome you to our fullest hospitality. Ladies and gentlemen, we are indeed glad to have you with us.

TOPIC: ORGANIZATION AFFECTING THE COURSE OF STUDY AND ECONOMY OF TIME

A. WASTE AND EFFICIENCY IN SCHOOL STUDIES

W. H. ELSON, SUPERINTENDENT OF SCHOOLS, CLEVELAND, OHIO

OLD METHODS OF DETERMINING EFFICIENCY

The study of educational waste as a factor in determining the efficiency of the school is a modern practice. In the past the school was judged largely by the number of its graduates, by the estimate the college placed

on the work of the favored few who chanced to go to college, or by the exceptional student who "starred" in some particular study in his university career. Little or no account was taken of the great majority—of the number that "fell by the wayside" before reaching the sixth grade, to say nothing of those who withdrew before completing the course of the elementary school, or before graduating from high school. Nor was attention given to the length of time required to complete the course, or the number of times a pupil might have to go over the same work. In short, the whole question of educational waste was ignored. Indeed, for many the problem did not even exist.

NEW STANDARDS OF EFFICIENCY

In recent years, however, new standards of efficiency have arisen and new criteria for measuring the work of the school have been established. The school is brought face to face with its own losses. The demand is that the school shall adapt its work to the needs of the individual child, in view of his ability, opportunity, outlook, and interests. We have begun to judge the school by its power to hold pupils once they have entered; by its power to carry children thru the course on time; by its power so to adapt its work that a given unit may be covered in a given time. These new criteria of efficiency turn the center of administrative interest from the needs of the few and the strong to the needs of the many. They place new obligations upon the school—not of doing less for the intellectually bright and for those going to college—but the duty of doing more to adjust its requirements to the abilities of the average children, and of adapting its work to the needs of those who from choice or necessity must complete their education in the public school.

WASTE BY WITHDRAWALS

The failure of the school to hold its pupils is one of the great sources of educational waste. In Cleveland it was found that for a ten-year period but 48 per cent of all the children enrolled in the first grade reached the sixth, but 36 per cent reached the seventh, and that but one pupil in four attained the eighth grade. In a word, taking the records for ten years as a basis of judgment, it was found that only one child in two ever advanced in the elementary school beyond the fifth grade. In the high school it was found that for a ten-year period one child out of every three withdrew before the second year, one out of every two withdrew before becoming a junior, and two out of every three failed to graduate.

Nor do the records show that these losses within the school are due to its breaking-down in recent years, for taking the first half of the ten-year period, the percentage of those graduating from high school or completing the eighth grade is a trifle less than for the last half of the period, thereby showing a slight gain in holding power on the part of the school.

When the life-history of ten graduating classes of high school is made the basis of judgment, the losses within the school from withdrawals are surprisingly large. Broadly speaking, it seems reasonable to conclude that of those entering the first grade, 95 per cent leave without finishing the high school, 50 per cent withdraw before reaching the sixth grade, and 75 per cent before attaining the eighth grade; while of those entering the high school, one-third leave before the second year, and two-thirds drop out before graduating. This is fairly typical of the country at large. Naturally the question arises, to what extent is the school itself, in organization, instruction, course of study, standards of values, promotion-scheme, or otherwise, responsible for these losses and for its own lack of holding power?

WHY DO CHILDREN LEAVE SCHOOL?

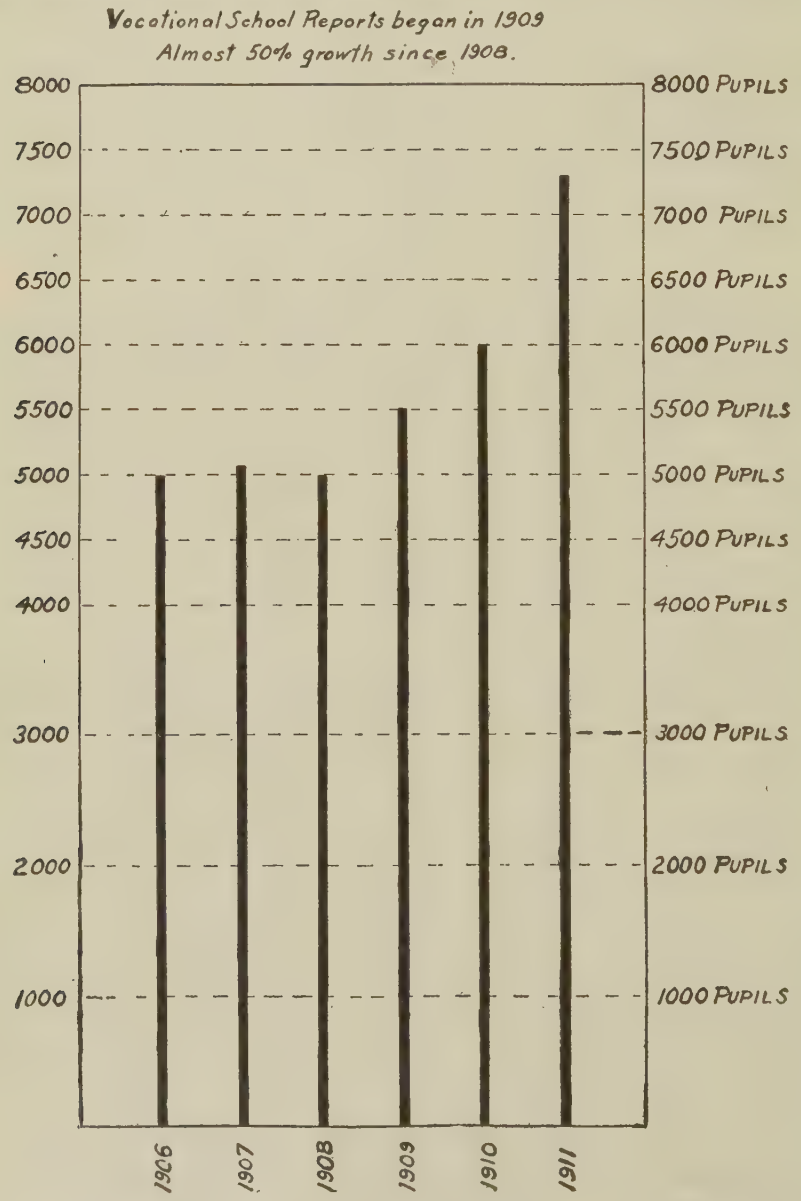
Accurate data bearing upon the causes of withdrawals from school are difficult to ascertain. The school cannot, of course, be held responsible for all the children lost to education by withdrawals; but in so far as the causes of withdrawal lie within the school itself, it must bear the burden of responsibility. It is important that careful record be made by all schools of the causes of withdrawals, to the end that a wide range of data may be made available, bearing upon the question as to why children leave school, and to warrant conclusions as to what extent the school itself is responsible for its losses. What is needed is data showing the actual effect on the holding power of the school due to changes in organization, courses of study, methods of promotion, etc.

In this connection I submit data showing the influence of practical courses in attracting and holding pupils of high-school age. Previous to 1908, Cleveland had six high schools offering the usual college-preparatory courses. In 1908 a technical high school was opened, offering four-year courses frankly preparing for work, without regard to college-entrance requirements. This school opened with 729 pupils, of which 484 had just completed the eighth grade, 122 were transferred from other high schools, and 123 were recruited from shops and factories—children who had left school and had gone to work, but who were attracted by a vocational school of this type. The next year a high school of commerce was opened, following similar lines of practical efficiency as that of the technical high school. The following table shows the influence on the holding power of the school as affected by courses bearing an immediate and close relation to the everyday activities of life.

ATTENDANCE IN CLEVELAND HIGH SCHOOLS

Year	1906	1907	1908	1909	1910	1911
College Preparatory...	4,983	5,059	4,989	4,787	4,436	5,293
Vocational.....	.....	.....	.....	729	1,560	2,005
Total.....	4,983	5,059	4,989	5,507	5,996	7,298

The above data show that in three years previous to 1908–9 the high schools did not grow, notwithstanding the city was growing at the rate of two thousand school children each year, as shown by the school census.



This is in no sense the fault of these schools, but is merely the inadequacy of a single type of school to meet the needs of all the children in a community. In 1908 vocational high schools were started, the technical in

1908, and the high school of commerce in 1909. The result is a growth in high-school attendance from 4,989 in 1908 to 7,298 in 1911—almost 50 per cent gain in three years. Moreover, it is to be observed that vocational high schools have started growth in the college-preparatory schools, and all are sharing in the revival of high-school prosperity. While for three years previous to the opening of vocational high schools the college-preparatory schools did not grow, yet these schools reached their highest enrollment in 1911, at a time when more than two thousand children were in attendance at vocational high schools. An increase of 50 per cent in high-school attendance within three years, the creation of a new high-school constituency, tends strongly to the belief that the holding power of the school is tremendously affected by the *variety of opportunity* offered, and by the relation which the school establishes with everyday activities thru the study-courses which it offers. The correcting of the maladjustment between the school and the industrial and business world outside the school, will have a marked effect in overcoming educational waste.

WASTE BY RETARDATION, REPETITION, AND NON-PROMOTION

But losses by withdrawals are affected also by retardation, for when children fall behind their grade they leave school in large numbers. In a typical city the records show that, exclusive of all special schools, one-fourth of all elementary pupils were retarded one to four years. Since these data take no account of those having withdrawn, it is apparent that conditions as to retardation are even worse than these figures indicate; for by the sixth grade more than half of those enrolled in the first have left school. Without regard to cause, retardation can have but one effect, and that is to deprive many children of the work of certain grades of the school. Since retardation is the direct result of going over the work a second time, repetition produces lamentable waste. Even in the upper grades, which deal each successive year with an increasingly select group of children, the percentage of repetition is surprisingly large. From data available it seems reasonable to conclude that, of all money spent on public education in American cities, one-tenth to one-eighth is spent on taking children over the work a second time, an enormous loss considered from any point of view. As a money tax, paid for the maladjustment of study-courses and promotion-schemes to the abilities of children, it is excessive. When the school is tested for efficiency by its ability to carry children thru its course on time it shows great waste.

But just as repetition causes retardation, so non-promotion is the prime factor in producing "repeaters." Obviously, the causes leading to non-promotion are many, some of which are beyond the responsibility of the school. However, the degree of the burden of responsibility which the school bears can be determined only in view of a wide range of data showing the causes of non-promotion. Every school should, therefore, keep careful

record of actual causes of non-promotion. From the limited data available it would seem that three-fourths of the non-promotions are accredited to incapacity and indifference on the part of children. This suggests strongly the need for a revision of standards of attainment and a readjustment of the course of study, adapting it to the abilities of the children. For the maladjustment of the work of the school to the capacities and interests of children is expressed in terms of withdrawals, retardation, repetition, and non-promotion. The thoughtful student of educational waste cannot fail to reach the conclusion that the school is addressing itself to the stronger group, and setting its standards of attainment beyond the range of the average children.

METHODS AND STANDARDS OF PROMOTION

Doubtless no one factor penetrates so deeply into the life of the school and has so much to do with educational waste as methods of promotion; for these involve standards of attainment and modes of advancing children from grade to grade, as well as from school to school. To a large extent, plans of promotion have developed traditionally and without much regard to their effect on school losses. But the time is at hand when standards of attainment must be redetermined, and a plan of promotion devised in view of its effect on withdrawals and repetition—a plan which shall enable children as a rule to complete the elementary-school course on the average in eight years, and the high-school course in four years. Such a plan must be so flexible that each child shall be permitted to advance thru the school according to his ability and effort. It must allow the bright child to advance in less than the average required time, and even tho the slow child may take longer, the average, when all the children passing thru the school are taken into account, should not be more than eight years for the elementary, and four years for the high school. It must offer the "square deal" to all children. Such a method of promotion can be devised and administered only in view of a large body of facts with regard to failures in studies, withdrawals, retardations, and non-promotions in a given system of schools.

A PROBLEM IN WASTE AND HOW IT WAS SOLVED

In Cleveland the following conditions obtained: It was found that for a ten-year period only one child in two ever advanced beyond the fifth grade; that one child in four was retarded one to four years; that every tenth child was a "repeater"; that 11 per cent of all elementary-school pupils failed of promotion.

These facts with reference to withdrawals, retardation, repetition, and non-promotion were brought to bear in determining a new promotion plan and in redetermining the length of the school year. To reduce repetition, the annual plan of promotion was abandoned, and a term plan inaugurated.

A term of twelve weeks was made the unit. At the end of this period children are reclassified, and when non-promoted the pupil repeats only twelve weeks of work.

Acting on the theory that there were as many pupils in the school who could do more than the average amount of work required as there were pupils who could do less, opportunity was made for the more rapid advancement of bright pupils. Since the non-promotions less accelerations amounted to one in ten, provision was made that 10 per cent of the pupils in any room might be given a double promotion, that is, jumped over a term's work; provided, however, that no pupil might be given a double promotion unless his standing for the term in all studies was 90 per cent or above, and that no pupil should be given more than one double promotion in a single school year. Tho double promotion of a given number of pupils will by no means eradicate repetition and retardation, yet in time the number of children repeating will be equalled by the number given double promotion, and the number of children behind their grade for their age will be offset or balanced by the percentage of pupils ahead of their grade. A school system thus becomes its own clearing-house, is made to check itself, and certain bad effects of repetition and retardation are neutralized. In this way the money cost of the "repeater" is offset by the acceleration of the stronger pupils.

SUMMER SCHOOL REDUCES WASTE

That it might be possible for the large number of retarded children to advance farther in the course of the elementary school, the regular school year was divided into three terms of twelve weeks each, and a twelve-week summer school, offering regular work and giving regular credits, was established, attendance being optional.

The twelve-week summer term makes a unit of work corresponding to a unit of work of the regular school year. Retarded children by taking advantage of the summer term are enabled to reduce the degree of their retardation and advance farther in the course than formerly. Three high schools were opened for regular work for a twelve-week summer term—a college-preparatory high school, a technical high school, and a high school of commerce—to which pupils from all parts of the city were eligible. Under this arrangement pupils taking advantage of the twelve-week summer term complete a four-year course in three years. In the elementary schools there were enrolled in the summer term of 1911, 4,187 pupils, and in the high schools 1,279, a total of 5,466.

In the elementary schools 3,245 children made up a term's work, thereby reducing their amount of retardation to that extent, while 276 of these received a double promotion. Thru the summer term and the increased flexibility of the plan of promotion the school system practically

checked its own losses and created a balance sheet, the number of children who lost time being equalled by the number who gained time. Moreover, the number of withdrawals was reduced over the preceding year by 2,633.

It is to be noted, however, that a regular summer term, correlating with a unit of work of the regular school year, offers no "bargain-counter" concessions to summer-school attendance on the part of retarded children. On the contrary, it merely offers a regular term's credit for a regular unit of work, done in the regular way. But a summer term which does not correlate with a unit of work of the regular school year, as must be the case under an annual or semiannual promotion plan, is reduced to the mere problem of allowing failed children an opportunity to remove their condition in certain studies. As a means of making up lost time and reducing retardation it offers merely the impossible, and does violence to children, since they must either fail of advance credit or be given credit for work which they have not done.

Whether a thirty-six-week school year and a twelve-week summer term, optional to children, and whether this mode of promotion will prove ultimately desirable, experience alone can tell. But as a method of solving the problem of educational waste, offered by the set of conditions above outlined, it has proved thoroly effective. Every school system offers its own set of conditions and its own special needs. At all events, these plans are illustrations of how definite knowledge of school conditions may be used in attempting to meet actual problems of administration. What is needed is that the course of study and the method of promotion shall be so adjusted to the abilities and needs of children that the average children advance thru the grades at the normal rate, the slower requiring more time, and an equal number of bright children requiring less than the normal time in which to do the work.

NEED FOR STANDARDIZING SUBJECTS, DEPARTMENTS, AND SCHOOLS

Notwithstanding that the value of studies is fixed by the time allotted in the daily program, study-requirements in actual practice seemingly have little relation to the value ascribed. Reading, for example, in a given system of schools is given 25 per cent of the total time of the elementary school, language and grammar 12 per cent, arithmetic 15 per cent; in the first year of the high school, Latin, English, and algebra are given like value. Nevertheless, the failures in language and grammar were, in view of the time value, almost four times as many as in reading; those in arithmetic five times larger; whereas in the first-year high-school classes 26 per cent of the children dropped out or failed in Latin, 15 per cent in English, and 32 per cent in algebra. Where records of failures in studies are properly kept it is not difficult to locate the studies that are the great offenders in swelling the ranks of the non-promoted.

Such variations reveal a need for standardization, not only in studies,

but in departments as well. Standards for completing a study of great value should be such as will actually put the emphasis on that study, rather than that pressure on one study when measured by the time allotted should be two to twenty times as great as upon another. But until positive data are collected with reference to failures in studies in the various grades, and these data made the basis of administrative action, little can be accomplished in equalizing and standardizing study requirements.

There is similar need with regard to standardizing individual schools, for there is wide variation in the standards of the several schools in the same system. For example, in a given system of schools, the failures in reading, based on total enrollment, ranged from 0 to 25 per cent; in language and grammar from 0 to 34 per cent; in arithmetic from 0 to 37 per cent; while the percentage of non-promotions for individual schools ranged from 0 to 47 per cent in the first grade; in the second from 0 to 38 per cent; in the eighth grade from 0 to 55 per cent. Such variations in standards in a single system can scarcely be countenanced. That schools should be rightly judged with regard to their work, and that there should be reasonable uniformity of requirements in different schools, there can be no doubt. Yet before this can be brought about data must be collected with reference to failures in studies and non-promotions in different schools; upon the basis of these, city-wide standards fixed, and the requirements of individual schools equalized.

CONCLUSION

A study of educational waste forces the conclusion that in the collection and use of data to guide in measuring the efficiency of the school and in determining administrative action, a mere beginning has been made; that if the efficiency of the school is to be definitely measured careful record of school losses must be kept, to the end that study-courses and promotion-schemes may be adapted to the abilities, needs, and interests of all the children, and the school itself be thereby enabled to check its own waste.

B. DEPARTMENTAL TEACHING IN THE ELEMENTARY GRADES

W. L. STEPHENS, SUPERINTENDENT OF SCHOOLS, LINCOLN, NEBR.

The tendency thruout the country toward departmental teaching in the more advanced grades of the elementary school is pronounced. This tendency has in the main resulted from the following generally prevailing conditions: (1) the difficulty of securing efficient teachers for the upper grammar grades; (2) the desirability of preparing pupils to assume more easily and successfully the larger freedom and responsibility of the high school; (3) the vitalizing of instruction by the specialist to the end that the waste resulting from unskilled teaching may be lessened.

The influence of these conditions led to the introduction of departmental teaching in the elementary schools of Lincoln three years ago. Four of the ten grammar schools are using the plan, the essential features of which, as adapted to our work, are as follows:

1. The sixth, seventh, and eighth grades are included in the departmental scheme.

2. Four clearly defined departments have been created, i.e., mathematics, geography and history, grammar and composition, literature. Music is assigned to one of these departments; art to a second; and writing to a third. Each teacher gives instruction in spelling, civic and moral training, and hygiene.

Furthermore, each teacher is held responsible for the instruction of the pupils in the correct use of English in speaking and in writing.

3. Each class has a teacher, termed the class sponsor, with whom it spends in recitation and study about one-third of the time, and who is responsible for the general conduct and attendance of the class.

4. No pupil recites to more than four teachers. This number does not include teachers of manual training, cooking, and sewing.

5. Weekly conferences of the departmental teachers with the principal are held, to unify and correlate the work and to discuss the needs of individual pupils.

This plan has been in operation for a time sufficiently long to justify the drawing of certain conclusions with reference to its dangers and weaknesses as well as with reference to its advantages.

The first danger likely to be encountered in instituting the plan results from over-departmentalizing the work. Pupils should not be required to spend the whole day in the department. Not less than one-third of the time should be spent with the class sponsor, whose influence will largely mold the general welfare and deportment of the pupils. She is the anchor that will prevent the pupils from floating out of sight of land. A common objection raised to departmental teaching is that the influence of the teacher over the pupils is materially lessened. In grades below the sixth, in my judgment, this is true. But even under the single-teacher plan inherent weaknesses exist that lessen or overdevelop this influence. Many teachers who are considered efficient do not influence favorably all the individuals under their charge. Many children are not reached in a wholesome manner by the personal attraction of the teacher. Incompatibility of temperament, mannerisms, voice, or dress may exert a harmful effect upon certain children, and this often results without realization on the part of the teacher. Moreover, the "mothering instinct" is too highly developed in some teachers. They have come to consider the chief function of the teacher that of protection and coddling. In such a presence, pupils fail to realize that school is a workshop wherein they grow to independent thought and action thru their own initiative. To remain a year with such a teacher spells disaster to many a pupil during his school career. These weaknesses of the single-teacher plan are not advanced in the attempt to strengthen the argument in favor of departmental teaching, but simply to remind you that dangers lurk in both systems.

However, in the departmental plan, every pupil will find some teacher to whom he is strongly attracted and whose influence will be continuous for several years. I recall a teacher in one of our departmental schools who especially appeals to boys and whose desk at intermissions is usually surrounded by lads eager to secure her advice relative to all their school activities. To another teacher, the girls are attracted; they tell her freely of their difficulties and troubles, even more freely than many of them tell their mothers. The influences that flow in upon pupils from several teachers are more like those of life. In the home and on the playground the child is not subject to the influence of one person wholly, but to the influence of many. As a result of this composite influence the child is more likely to develop symmetrically and to preserve his individuality than if he were too constantly under the influence of one person alone. In my judgment the intimate, rare, and lasting relations between teacher and pupil are more common under the departmental plan than under the single-teacher plan.

The second danger of departmental teaching is the confusion that arises because of the pupil's contact with several teachers whose standards of requirement and whose methods and ideals of teaching differ widely. A sixth-grade boy expressed the idea in this way: "Just when I have found out how to do things the way one teacher directs, I'm sure to be in trouble with another if I follow the same plan. I can't always remember which is which." Closely related to this, is the fact that no one teacher realizes all the problems and difficulties that confront the individual pupil, and in her zeal to promote the interest and magnify the importance of her department, she forces the child beyond his power of endurance and assimilation. Herein lies the greatest danger of the departmental teaching. To meet these difficulties we have found the following methods of procedure necessary:

1. Regular weekly conferences of the teachers and principal, at which the character and scope of the work being done by each is discussed. At these conferences the possible correlations of subjects are determined. Length of assignments and amount of home work required in each department are discussed, so that each teacher realizes all the demands made upon the pupil. The weakness of a pupil in any department is disclosed and his work in the other departments is also discussed. In this way the teachers get in mind the whole work of the child, who in turn gets a fair and impartial rating. These conferences are of the most vital and far-reaching consequences. The status of the individual pupil is established, the interdependence of studies pointed out, and the vision of the teacher enlarged.

2. Clearly outlined courses of study, so that the scope of the work is clearly understood by the teacher and the temptation removed as far as possible from the overambitious and enthusiastic specialist to go beyond the required work of her department.

3. The admission of pupils to the department not earlier than the seventh grade. We admit the sixth grade to the department in order to make available four teachers for departmental teaching, but after a three years' trial, I am convinced that sixth-grade pupils do not carry successfully the responsibility imposed and are confused by the contact with several teachers. At the earliest opportunity we shall revert to the single-teacher plan for the sixth grade and employ an additional teacher for the departmental work.

There is, however, one advantage in having the sixth grade in the department. After having the opportunity to become thoroly acquainted with the pupils in the sixth grade, the departmental teachers find the adjustment between sixth- and seventh-grade work easily made, and more can be accomplished by the pupils during the two remaining years of the grammar-school course.

Thus far the paper has dealt with the dangers of departmental teaching and the manner in which these dangers can be lessened or eliminated. Let us turn to a consideration of the advantages.

Under departmental teaching the discipline is materially improved. Some reasons for this are disclosed in the answers of the pupils to this question, which was sent to all eighth grades in the departmental schools:

"Do you consider the plan of departmental teaching superior to the plan formerly used? Give your reasons for your answer."

Ninety per cent of the pupils favored the departmental plan. Of those favoring the plan 80 per cent gave these two reasons:

The change and relaxation in passing from room to room kept them alert and prevented restlessness.

The teacher, confining her efforts to one or two subjects, became more expert in teaching and made the class work more interesting and more easily understood.

These statements of the pupils themselves are significant. The educative value in coming in contact with different teachers and different environment during the day is restful, pleasing, and stimulating. Furthermore, the pupil realizes that he is a member of a larger social group, whose activities if directed aright will be more influential for good in the life of the school than those of a smaller group. He feels his importance more keenly and realizes that it is possible for his influence to have a wider sweep, therefore he is willing and anxious to assume larger responsibility. He is impelled to exert all his powers to meet successfully this larger opportunity, which is presented at the very time in life when he has an uncontrolled desire to be like the "grown-up," to bring things to pass, to go forth relentlessly to hunt the dragon and when he is found to slay him on the spot. Thus boys and girls find themselves. Under the single-teacher plan a pupil may cease endeavor because he believes, and the belief is an honest one, that the teacher is partial, unjust, and unsympathetic. Under the departmental plan, if the pupil discovers that several teachers are placing the same estimate upon him, he begins to realize that the fault must lie within, and such realization is the first step toward reform. The opportunity, then, to relax at the end of a recitation period, to come in contact with different environments which produce variety in reactions, and to become a part of a larger social whole wherein lie larger responsibilities and opportunities, produces the most wholesome disciplinary effects.

Better equipped classrooms have resulted from departmental teaching. The apparatus for the teaching of history and geography, including maps,

globes, stereopticon, and other illustrative materials, is collected in one room. A similar plan is followed in the rooms devoted to the work of other departments. The advantages are obvious. All the material for use in a given subject is to be found in one room, ready for instant use, instead of being scattered in three or four rooms, meagerly equipping any one room, and making it necessary to convey equipment from room to room. Often the apparatus needed for illustration, arising from some unforeseen condition in the recitation, is in another part of the building, not subject to the principle of "the recall." Under the single-teacher plan the instructor is in almost constant distress over exchanging hurriedly the illustrative materials used in one recitation for those to be used in the following recitation. This shifting of scenes to keep the performance from dragging often reminds one of continuous vaudeville. In the departmental plan, these difficulties are almost entirely removed, and instead, each room with its proper equipment has an atmosphere characteristic of the subjects therein presented, which has a most refreshing and stimulating effect upon the pupil as he enters.

Another advantage lies in the added efficiency from the standpoint of administration. Several factors are involved in this phase of the problem. Under the single-teacher plan, when a class begins the work of a new term in all subjects under a new teacher, several weeks may elapse before the understanding between the class and the teacher is sufficiently clear and sympathetic to bring satisfactory results. In departmental teaching, the class will never begin a new period under an entirely new corps of teachers.

Responsibility for results in any subject can be fixed with more certainty. This is a decided advantage from the viewpoint of administration. For example, if glaring weaknesses are disclosed in mathematics by the supervision, the teacher of this subject cannot escape responsibility by attempting to heap censure upon the previous teacher. One of our teachers may have taken herself too seriously when she said: "If a decimal point is discovered out of place in this building, I can't escape the responsibility," yet she was in a frame of mind to render effective service.

The unity and force of the management is further increased by reason of better preparation for, and closer articulation with, the high school. About one-half the time devoted to study is spent under the direct supervision of the teacher for whose recitation the pupil is making his preparation. The remaining study periods are spent in independent study. This plan enables the teacher to give definite directions to the pupil how to study; it also affords the advantage of throwing the pupil upon his own resources in study. This independent study, together with the training the pupil acquires in adapting himself to the methods and ideals of instruction given by several teachers prepares him for the larger freedom and responsibility characteristic of the high school. At the risk of digressing somewhat at this point, I wish to say that on the whole the effect of departmental teaching upon the

pupil is wholesome. The opportunity for freer action is afforded; the forming of independent judgment, encouraged more consistently. The dull pupil thrives better, because the specialist is more keen in discovering latent talent. He seeks the advice of the teacher whose personality appeals to him most strongly. Favoritism is lessened; and pupils are kept in school longer.

Under the departmental plan more skillful teachers will be developed. This will result first thru a process of elimination. It not infrequently happens that teachers who under the single-teacher plan are rated as satisfactory fail in the departmental work. This is probably due to one of two reasons, possibly to both. Pupils, as they come in contact with several teachers, rapidly grow in their ability to distinguish superior training and teaching ability. At the same time, they discern more keenly the lack of these on the part of weak teachers and take advantage accordingly. The latter kind of teachers must be removed from the department or disorganization is likely to follow. It should be noted here that the departmental plan necessitates more searching and intelligent supervision on the part of the principal. This plan does not possess such inherent power that, once let loose in a school system, it will run itself. The principal must constantly "be on the job" and in sympathy with it. As a result of this closer supervision, the weaknesses of the teacher will be more surely revealed.

The development of more efficient teaching will result, in the second place, from the opportunity afforded the teacher to specialize in one or two subjects or in a group of related subjects. It is distressing to note what is expected of the teacher under the single-teacher plan. A few of the subjects that she is supposed to teach are herewith enumerated: arithmetic, algebra, geometry, history, geography, composition, grammar, literature, music, art, spelling, writing, civics, morals and manners, elements of science, including botany, physics, astronomy, geology, hygiene with special reference to the effects of stimulants and narcotics, essence of patriotism (whatever this is), and physical training. The time allotted to this paper forbids the mentioning of others. If there is anything more perfectly designed to drown out the spirit of study and investigation on the part of the teacher than this deluge of subjects, such has not yet been revealed in the realm of human knowledge.

To secure teachers properly prepared for departmental teaching constitutes a serious problem. Our present plan is to select from the system at large those teachers who have shown unusual skill and interest in teaching a given subject. The state university offers courses after school hours and on Saturdays in order to give these teachers an opportunity for further specialization. The development is slow but ultimately success is assured. The normal schools should recognize the fact that departmental teaching in the elementary schools is rapidly gaining in favor, and should so remodel and extend their courses that the specialist may be trained for work of this

character. The training now received in the normal schools does not prepare for such teaching. In the end the departments will demand the teacher whose training is little, if any, less than that of the high-school teacher, and a salary commensurate with the training demanded must be paid. As a result of this preparation, the lives of boys and girls will measurably be enriched, not by adding subjects to already congested curricula, but by the teachers' bringing a broader view, riper scholarship, and richer illustrative material to bear upon the interpretation and presentation of what we now have.

In conclusion: If the adaption of departmental teaching to the upper grammar grades is made with the following necessary provisions: avoidance of over-departmentalization; frequent conferences to determine the needs of the individual pupil and to correlate sanely the work of the departments; the hearty sympathy for, and belief of principal and teachers in, departmental teaching, results more satisfactory than those found under the single-teacher plan will be secured. The discipline will be more wholesome, classrooms better equipped; stronger unity and force in school management evolved; better preparation for the larger responsibilities of the high school acquired; a more skillful corps of instructors developed, whose teaching will be vitalized by the spirit that nourishes the life and growth of the child for whose welfare the school exists.

C. THE CHILD VERSUS PROMOTION-MACHINERY

D. E. PHILLIPS, PRESIDENT OF BOARD OF EDUCATION, DENVER, COLO.

I find that a paper presented to this body thirteen years ago apologizes for presenting a matter of "minor consideration."[1] I apologize for lack of ability to make clear in twenty minutes the paramount importance of this subject in relation to the entire educational system. I declare it second to none save that of the direct moral welfare of the child, and it also has much to do with moral life.

I also find that thirty-two years ago, the sane and sensible statement was made to the National Education Association *that promotions should be made at any time during the term, whenever a pupil is prepared to take up and understand the work of the next higher grade.* Yet today I have among my replies howling objections to this sensible statement, calling it "chaos" and a "retrogression of our excellently perfected machinery." It was about this same year, 1881, that Superintendent Howland of Chicago took the breath out of the high-school principals by announcing that henceforth all pupils would be admitted to the high school on the grade principal's recommendation, and on that alone. The poor high-school teachers felt hopeless without some definite percentage to tell just how much *past* knowledge to expect of the child. The horrors of not knowing whether the dead line of 75 per cent

[1] W. W. Chalmers, "Report," 1899.

had been passed! This was a master-stroke of administration. Its fruits have spread to the whole country.

You are all familiar with that valuable report of the New York and Brooklyn teachers' associations. I have intentionally directed my remarks to points not made prominent in that report. The thoroness of that work will account for some of the omissions in my brief paper. But if anyone can pass in silence some of the statements, not by the committee, but by educational correspondents, on such subjects as "allowing a child to work to his fullest capacity," and "doing over work satisfactorily passed," it is more than I can do.

The committee well states that "the rapid evolution during the past twenty-five years of the American common-school system of education into a hard-and-fast graded system is universally recognized"; that "no adequate incentive for highest endeavor is inherent in our present graded system." I heartily agree with the committee that our primary aim should be to put the child where he may work up to his fullest capacity to the best advantage to himself as a child.

My remarks are based upon a short practical experience some years ago; upon the study of educational problems; upon observations of the practical working of the very system which many call *ideal*, but declare impossible because they have never given it a proper test; and finally upon about two hundred replies from grade- and high-school principals and from superintendents concerning this subject. Nearly all of these replies are from the Rocky Mountain States; two-thirds of them from my own state. Twenty minutes afford no time for details of the many systems in use. I shall attempt to bring to your minds five ideas:

First, the two dominant and opposite tendencies as represented by my returns.

Second, several significant efforts to take care of the backward and the bright pupils, not coming under the general systems; such as, the Cambridge, the Pueblo, the Batavia, etc.

Third, to show that the method of daily percentage grades with final or periodic *examination-percentages*, by which the fitness of a child to be promoted is determined, is absolutely pernicious, unjust, and productive of intellectual chaos. It is this topic that the valuable report to which I referred has entirely omitted. In many ways I believe it more important than the promotion itself.

Fourth, the cloud that is in some places settling over our country schools.

Lastly, I shall try to maintain that each child should at all times be at work in the grade and in the subjects that he can get most out of, without regard to what he knows or does not know about studies behind him, and without regard to how much less or more he knows than other pupils.

Let us now turn to a brief consideration of these five points.

1. A few representative quotations from the returns must suffice.

The old conservative hard-and-fast system and the power of tradition are still powers in practice, if not in theory. A superintendent writes: "We have mid-year promotions in only a part of our subjects. In others it is a whole-year credit or nothing. We reserve the privilege of counting

25 per cent on application, and may *fail* a student who passes a *good examination.*" Another says: "Numerical grades are sent to the office to be used in special cases." A grade principal says: "We promote on the half-year plan. Provided a student fails in more than half his work, he is required to take the entire half-year's work again." Again: "Promotion is dependent upon making a certain fixed average with the exception that a child may be promoted on condition, if he is low, not to exceed two studies." The same principal adds that he has a boy in the eighth grade who did not pass the seventh, who is making up and will finish the eighth all right. Another says: "I favor, in theory, promotion by subjects. This we find difficult in practice." A superintendent of some twenty-five teachers writes: "We have numerical grades. This seems to be a necessity that we may know where we are at. There must be some guide and locating-place." Another superintendent says: "The term *promotion-machinery* is more dreadful in name than in actual operation in well-regulated schools." A principal of a large grade school writes: "We have numerical grades and pupils are required to attain a certain minimum standing in order to be promoted. However, our superintendent has a rule which he calls 'service promotion,' under which pupils are promoted after two years in one grade."

The best statement of the conservative method of promotion on a *percentage-basis* comes from a superintendent of one of the first-class districts in Colorado. "I would say that we base our promotions primarily upon percentage of grades earned in the more important studies. The plan of making promotions entirely on the judgment of the teacher may be excellent in theory, but in actual practice it very often produces grave annoyances, such as the feeling that the teacher is partial to certain children, but has it in for certain other children, who thus do not have a fair opportunity. When there are carefully selected questions given to the pupil who is old enough to answer in writing, it gives the child an opportunity to make a record concerning which there can be no reasonable dispute. . . . . After the child has gone over the same work two or three times it is our custom to promote that pupil 'by courtesy.'" Again, a principal of a large high school says: "Yes, we have used the numerical system of grading, feeling that it tends to *carefulness* and *accuracy* on the part of teachers."

This is a glimpse of what I should call the conservative undercurrent; but I am rather sure that nearly every one of these would claim to be quite progressive.

Now just listen to a few conservative sentences taken from page 86 of the report already cited. In response to the question: Should the child be placed where he may work up to his fullest capacity? here are some of the things that have been said: "No, it makes them unbalanced." "No, such a condition is imbecile." "No child should get to the high school before fourteen years." "Pushing children through the grades and out at the top before they are mature enough in body and mind to profit by

secondary education is akin to man-slaughter, for it is little short of child-slaughter." "It is a crime against childhood to crowd children through the grades." "I do not believe it wise to advance precocious children more rapidly than is provided by regular promotion." This makes me want to fight on behalf of the God-gifted child that is not yet able to fight for himself.

Now a few remarks from what may properly be called the liberals or radicals. From my returns I condense the following: "The old system is vicious, and has literally slain its thousands. Bright girls have been held for all the work of a grade because the teacher's recitation book and examinations only totalled 64 per cent instead of 65, perhaps in a single branch, perhaps arithmetic. This is the only question I ask any teacher to decide: Has the pupil power to do the work of the next class or subject? If so let him do it and do it now." Again: "For twenty-one years I have had no system. Systematized promotions tend to defeat our end—to advance the child according to his capacity. A hundred or more promotions have been made already this year, and only in two or three cases did we make a mistake. They are easily corrected." A superintendent says: "If promotion periods are too far apart the boy with red blood—the leader—resents such conditions; and if not relieved, breaks out into the world where he feels he has a fighting chance." "My trouble," writes a principal, "is to have teachers realize that the child is greater than any system. I hope I was never so devoid of *common-sense* as not to place a pupil in the *highest* grade in which he was able to do satisfactory work." A principal who for many years has run a large school, who has demonstrated the falsity of the claim of necessity for grades and stated examinations, the absolute falsity of the repeated statements that a school run under flexible conditions costs more, and the falsity of the statement that promotion by subjects in the grades will not work, writes me as follows: "Pupils are promoted from class to class and from grade to grade at any and all times; so soon as a pupil is discovered who can do, or should be doing more work, no matter what the grade, if the *physical* condition permits extra effort, he is advanced. It often occurs that pupils are promoted who are required to recite in two classes, until evenness in grade work is attained. No examination for these promotions is required." Again: "Whenever a child has the power to do advanced work he should be promoted, and by the application of common-sense any teacher should know fairly well when that is."

About one hundred and fifty communications are of this liberal type and the writers are practicing what they preach, and thank the Lord they have nearly all abandoned that *make-believe* justice of recitation percentage and final grade of sixty-five or seventy-five.

2. I have accounts of dozens of ways for helping up the backward child. Bare mention can be made of only a few. Combination of backward pupils of a higher grade with bright pupils of the lower in the same room under a skilled teacher; ungraded rooms for backward children; the

practice teachers being used to help up the backward children; substitution for the so-called important subjects of some of the less essential ones; attendance in night schools; combination work in eighth grade and high school: these are examples of some of the methods used. The last-mentioned system is admirable where both schools are in the same building or near by. It relieves both the backward and the more capable pupils. One system of relief for the most capable permits the child to recite for a while in two grades in the same subject, and drop the lower one as soon as he is sure of doing the other.

3. The most unreasonable educational idea that has hypnotically spread from the colleges down to the first grade is the idea that a teacher with forty children can ask a question, call on a child to recite, grade him 0, 4, or 10; keep this up for five or ten months, then present an array of questions to be answered and graded in like manner, and by the final addition of these results determine the child's knowledge and fitness for promotion. Yet college professors and principals stand up and say that such a thing is a *necessary evil.* It is only the power of habit and the suggestion that such things are necessary that dominate our teachers and the community. Only a few days ago, I heard a principal say that he tried to get along without grades and *report cards* for three months, and found that all concerned preferred the old system. Can you educate a community or teachers out of a lifelong custom in three months? In that same city are schools as good as ever run in America in which such *necessary evils* have never existed.

Some months ago, thru the kindness of Dr. Clarke, I copied the examination manuscript of a boy's final test for promotion from the eighth grade. It was a paper in arithmetic. In some institutes where teachers were inclined to talk glibly about grading on what the paper is worth, and avoiding partiality, I gave the teachers this paper to grade. One hundred and fifty teachers gave grades ranging from 29 per cent to 88 per cent. But they immediately began to say that they would be obliged to know the *boy* first. I said, "Very well. But why do you then pretend that you base your percentage wholly on the paper?" They then named fourteen different things that should be considered in passing that boy. They were right and could have mentioned more. Again, what is poor work for one pupil may be excellent for another, and absolutely worthy of praise.

Whoever observed a growing, bubbling child knows that the expressive side of life never keeps up with the receptive side. The highest, truest, and deepest value of education can never be measured objectively. You feel it, or read it in the soul of the individual. Some things are qualitative and defy quantitative measurement. There is some truth in the paradox that the more we know about a thing the less able we are to define it. When a high-school boy I could define electricity better than Edison can today; and God knows that I could define Him better when a Sunday-school pupil than I can after years of study.

I repeat that this system of promotion on a fixed percentage supposed to represent so much knowledge in any given subject is the greatest piece of injustice ever invented by any educational system. It is a deception and a snare that prevents the operation of the common-sense of parents, pupils, and teachers. Who will stand up here and tell us the list of geographical facts a child must know in the fifth grade before he can do sixth-grade work?

4. The danger that threatens our country schools can be presented in a few words. Some states have developed the system by which the county superintendent or a state board prepares the questions that determine eighth-grade graduation. They are sent to the teachers in closed envelopes, to be given to the pupils, answered, and returned for correction. If such a vicious system was not found in my own state I would say what I think about it. During the whole year both the teacher and the pupils keep guessing what the questions may be. Proper interest, independence, and originality are crucified. How does the superintendent or this clairvoyant board know whether or not a child whom they have never seen should enter the high school?

The great nation of Italy fixes the grade percentage for passing in its national legislature, and they actually debate for days whether it should be 65, 70, or 80, and under what conditions, if any, a child should be excused from the final examination. China has had some such method for a thousand years.

5. Finally, *I must maintain that each child should, at all times, be at work in the grade and in the subjects that he can get the most out of without regard to what he knows or does not know about studies behind him, and without regard to how much more or less he knows than other pupils.* Is it not comical to talk about promoting a child "by courtesy" after he has been over the grade two or three times? Or of a "time-service promotion"?

Stephen Phillips describes "the Woman with a Dead Soul." Surely there must be some men with dead souls, or at least those whose only evidence of life is their desire to produce more souls as dead as themselves.

I further believe that the difference that separates educators is not at bottom so much a question of practical possibility as a question of the function of knowledge. I hold that outside of the immediate business or occupation of an individual the primary function of facts is to create the proper attitude toward the activities and problems of life, and to arouse interest and intellectual activity. Will it not be found that the old system of "know so much before promotion" exactly reversed this order? Under such an idea attention, interest, and intellectual activity existed for the accumulation of facts and knowledge.

Over-thoroness and accuracy have been made an immense burden without sufficient after-results in life to justify them. Intelligence, not memory, is the most precious thing in the universe; and in the language of

Principal Bishop, of Detroit, "You are doing a rank injustice if you make pupils mark time or keep them back in anything."

To allow the child to make the most of every moment of life in our public schools is not impossible. It is being done. When shall we learn to teach children and not subjects and textbooks? When shall we learn that in our effort to educate all the children we must deal with minds of all grades from the imbecile to the greatest geniuses that God ever turned loose on this earth, and that it is our business to provide for all of them? When shall we learn to look into the soul of the child and realize how far above our machinery that soul might soar if only we would not care more for the machinery than for the growing soul of the child?

D. SOME ADJUSTMENTS AND CHANGES IN THE COURSE OF STUDY AND SCHOOL ORGANIZATION SUGGESTED BY THE NEEDS AND THE CAPACITIES OF CHILDREN THAT VARY FROM THE STANDARDS SET FOR AVERAGE PUPILS

D. H. CHRISTENSEN, SUPERINTENDENT OF SCHOOLS, SALT LAKE CITY, UTAH

Dr. Chadsey has asked me to speak to you on "original and suggestive work in the Salt Lake City school system along the lines of what might be called the unusual." The rather pretentious topic assigned suggests the line of thought that I shall attempt to follow. While our movement is not original, it may have a few distinctive features. At any rate, it has been inaugurated to meet a condition and not to substantiate a theory.

In the discussion of this subject I shall for convenience divide it into three distinct sections, each one of which will deal with a department in which in our schools there is a well-defined, purposeful movement.

In the first section I shall consider the preparatory school which includes within its scope seventh, eighth, and ninth grades, and which may with propriety also encompass the tenth. It provides for some elective work, but not for the purpose of specialization.

The department has been established in recognition of the right of the child, even the "unusual" child, to receive from the school the kind of training best suited to his needs and capabilities. To secure harmonious relationship, the course of study must be adapted, not the child. Any change that the child undergoes must be growth and not adaptation to artificial standards.

In the second section the function of the ungraded room in serving the purposes of the child that is above or below the average in his class will be discussed. The department looks quite as much to the interests of the bright, precocious child as to the interests of the slow, backward child. It is not, however, intended for the mentally deficient or subnormal child. When discovered, he is transferred at once to the school for backward or

mentally deficient children, which is the third section for consideration. The school for these deficient children is centrally located, and they are transported to it at the expense of the Board of Education. It is used exclusively for this type and is, in part at least, a laboratory as well as a school. The head of this institution has been especially trained for his work, and his assistants are teachers selected because of their pronounced fitness for this class of work.

These three departments, it will be seen, are so varied in their combined scope as to provide a place for every child that does not belong to the large group of children whose interests are well guarded in the regular classroom.

THE PREPARATORY SCHOOL

It is manifest to all students of the school curriculum that the difficulty of meeting the needs of the individual child in class instruction increases as he moves upward in the grades. The nature of the prescribed work in primary grades and in the lower part of the grammar department is such as to appeal to the interests of practically every child and to meet his general requirements. His marked personal tendencies and aptitudes begin, however, to assert themselves as he passes thru fifth and sixth grades, which in so many respects represent a transition period in his life, and when he enters the seventh grade his natural bent is likely to be easily discerned. In some cases, perhaps the quality of his previous teaching may be a factor in predetermining this inclination, but most likely it is an expression of his own individuality developed under proper environment—the home and the school, and it may be that heredity has played its part. At any rate this condition arises, and who will say that the disinclination to attend school manifested by so many fifth- and sixth-grade boys, which all educators recognize and which has had voluminous discussion from many leaders in educational thought, is not due in part, at least, to the fact that the prescribed work in seventh and eighth grades, which under present conditions has so little regard for individual aptitudes and inclinations, is too restrictive in its scope and fails to appeal to them? Germany in her splendidly organized system has long since taken cognizance of individual proclivities and needs and has provided elective work with certain well-guarded restrictions as early as the third year. We cannot hope to begin so low in the grades, even if it were desirable, but the opportunity for some degree of choice should be given at the beginning of the seventh year. Every year it is necessary, in the interests of justice and fairness, to promote to the high school some pupils with a "minimum" mark in some subjects and a "condition" in others. The minimum subjects are supposed to be those for which the child has a minimum capacity and in which he cannot even with faithful and persistent effort reach the degree of attainment required for promotion. They are always, however, the ones for which he has a dislike and the ones in which little interest is aroused. The requirement that makes it compulsory for him to pursue these studies frequently results

in a permanent aversion to them, whereas a temporary discontinuance of them during a period of development of one or two years would likely bring the child to the place where he not only finds pleasure in pursuing them, but where he can do so at a much smaller expenditure of energy and with decidedly better returns than would formerly have been possible. I would not include in this class those branches the necessity of which as fundamentals all recognize. It is, however, in no way rare to find a bright and promising young girl forced to the point of failure and subjected to constant humiliation in her arithmetic, when her reading and language work give unmistakable evidence of an unusual intellect. The constant dread and the humiliation caused by her low standard of work in arithmetic not only rob her of the charm and delight of her school days, to which she is justly entitled, but her efficiency in the subjects in which her aptitudes are pronounced is perceptibly lessened. And then, too, it is not improbable that the constant worry consequent upon the doing of that work for which such a child has a natural aversion, an aversion which the best teacher cannot overcome, may have an adverse effect upon the health of the pupil, especially the girl who is just entering the adolescent period of life. Experience shows that many of such pupils during their seventh and eighth years—and here I have in mind particularly the girls—can distinguish themselves, and at the same time realize the maximum of pleasure in the effort, in the study of languages, particularly modern languages.

Our experience shows that these younger children acquire a vocabulary with surprising quickness and ease, they master idiomatic forms of expression readily, and they get a better foreign accent than do the older children. And above all else they find a pleasure in this work that more mature students seldom experience. They talk and read within the range of their acquisitions from the initial lesson. Grammatical forms are considered only as occasion arises for their use. Every new word or idiom learned has an immediate and, so far as possible, a constant application.

Unfortunately, the teaching of languages has by some been considered the exclusive function of high schools, when, in fact, the very nature of mind development makes an earlier period in life the more economical and effective time for their acquisition and mastery. The arithmetic work outlined in seventh and eighth grades, if it must come some time, can in some cases be done more effectively and in a shorter time later in school life, when more experience has been acquired and when a more mature development has taken place. Some parts of history, of civil government, and of grammar now included in the eighth grade might well be moved to the ninth grade, and some of the science and the English offered in the first year of high school could be at least as effectively taught in seventh and eighth grades. It is, then, a safe and conservative position to hold that the interests of the individual child require the overlapping of the course now outlined for the first year in high school and the work prescribed for the

upper part of the grammar department, and that the resultant must be an improvement in grammar-grade work, and an added efficiency in high-school work because of more effective instruction in the ninth grade (freshman high-school year) and consequently a better equipment for the second year of high school and the work that follows. A condition that would enhance the pleasures of school life and also likely prolong it, is not to be overlooked.

In reorganizing the remaining part of the high-school course it might be advisable to extend it to three and one-half or make it even as it now is—four years—but even that necessity would not invalidate the argument for the reorganization of the work of seventh, eighth, and ninth grades on the lines indicated.

THE UNGRADED CLASS

From the nature and scope of a course of study it is based almost entirely upon the need and the capacity of the average boy and girl, altho it must be admitted that the interests of the child above or below have not been entirely overlooked. But in school organization in the regular classroom an effort is made under conditions not altogether favorable to provide a condition that will permit the teacher to eliminate, in a measure at least, the exclusively group or class plan of instruction. This tendency finds expression in her conscious effort to adapt her instruction to individual needs in the course of the development of a subject. For the thoughtful, carefully prepared teacher, this task is not difficult when she is dealing with pupils whose rank and capacity place them within close range of the average child, whose group, by the way, consists of the major portion of the class. The difficulty, however, is greatly enhanced when some of the children, by reason of exceptional native ability or development or because of limited capacity, are much above or below the class standard. It will be noted that a period of development represented by one semester or a half-year separates each class from the one above and the one immediately below, and consequently the variations from class standards must be found in the intermediate ground or else they would naturally fall into another group. An effort to adapt the teaching to the needs of the few advanced children places the instruction beyond the full grasp of the major portion of the class and interest on their part will necessarily lag and the possibilities of the recitation must be greatly minimized, while the endeavor to move on the plane occupied by those low in the class rank will fail also to appeal to the majority and results are again unsatisfactory.

The pupils of a class a month or two after the beginning of the semester may then be resolved into three groups, at least two of which are found in most rooms:

1. The middle group including those that are of average rank and also the ones just below and immediately above the class standard. In this section we usually find from 60 to 90 per cent of the children. In fact, this group may include the whole room. For

reasons that are evident, it is not unusual for the entire 2B class to belong to this group during the first semester of the year.

2. Those farther below the class standard than the ones already listed. These children again fall naturally into two groups: (*a*) the older, more mature children who have been promoted because they have met the "time" requirement in the class below and have been regular in attendance and faithful in work, but whose capacity for development seems limited at present; and (*b*) the ones who have at least average ability but who are behind because of irregular attendance.

3. The pupils in advance of any in Group 1. It is not likely that Group 3 will have in its membership any below the average child of the class in mentality, because it is probable that if such slow child were above the average of his class in development and in his acquisitions he would be given the benefit of all reasonable doubt and be moved into the low or the average group of the next class, where he would find an environment better suited to his needs. In Group 3, however, may be found several subdivisions, especially in the latter part of the semester: (*a*) the precocious child who is in the habit of outstripping his classmates; (*b*) the retained child who has fallen behind because of irregularity or because of lack of effort, but who has resolved now to make a "special"; and (*c*) occasionally the once seemingly sluggish child whose powers, for reasons that baffle the teacher and parent alike, begin to unfold at an unusual rate of development.

A room in which all of the pupils at the beginning of the semester appeared to belong to Group 1, may soon, in spite of a conscious and well-directed effort on the part of the teacher, give evidence of a membership in the upper and the lower groups. Sometimes they seem to appear simultaneously, but generally, tho not necessarily always, the lower section shows itself first. This priority is due to the fact that the membership of the lower group, if it have any, is responsible to already existing, but not necessarily discernible, causes. Membership in the advanced group is usually determined by causes arising as the work progresses. A well-taught room is likely to develop an ever-increasing tendency toward the upper classification and a decreasing one toward the lower.

But the cause of this multiplicity of such classes in the modern graded school is of interest and value only as it aids the effort to meet and solve the problems that naturally arise. And the problem of most vital concern is that relating to the environment and instruction best suited to the needs of the children materially above or below the class standard. The so-called ungraded room into which such children are brought for individual instruction and study, for such time as their interests may require, has demonstrated its suitability over the regular classroom. Frequently after a few weeks' training some of such children advance until they meet satisfactorily the requirements of the next advanced class, while others move upward into the middle or normal group of their own. As they pass out, new candidates come to take their places, and thus the ungraded room has an ever-changing enrollment. The experiment of the ungraded room in this city has been tried enough to prove its place in our scheme of education, the aim of which is to reach and to serve the interests of the individual rather than the mass.

Reports of the work in several classes give some interesting points.

SUMNER SCHOOL

The ungraded room certainly does not lack variety in the class of pupils which gather within its walls. These pupils, I think, might be divided into three groups: (*a*) those who with a little help and guidance can easily do the work of the higher grade; (*b*) those who are behind their class on account of enforced absence; (*c*) those who find great difficulty in keeping up with their class on account of their inability to grasp one of the fundamental subjects.

The class first mentioned come to the ungraded room as permanent pupils for the space of time required for them to catch up to the higher class. They go to their own rooms for music, drawing, and spelling so that their day's work is not too monotonous. The remainder of the time is devoted to the fundamental subjects which they must know thoroly in order to do the work of the advanced class. In the higher grades these subjects are geography, grammar, and arithmetic; in the intermediate grades language takes the place of grammar, and in the primary grades reading is very important.

It is a great pleasure to work with these pupils, for they are very appreciative and so eager to get every point needed. That they are very anxious to show us that we made no mistake in choosing them for a special promotion is shown by the number of times they later call on the ungraded teacher with their monthly reports and their marks received in tests. The mid-year tests show that our pupils who made special promotions this year are very near the head of the lists.

The second class usually need but little attention given to them unless they have been absent for a very long time. These are not permanent pupils but come to the ungraded room for one or two periods during the day at such times as they can best afford to miss the work of their own rooms—usually at study periods. Glad of this opportunity of keeping up with their class, they willingly do at home the preparation work missed in their rooms. When they have mastered the important points needed they are again full-fledged pupils of their class.

The last class is really the one that does the hardest work, for these pupils are trying to master a subject which probably has been hard for them during their entire school life. The explanation given in class on a subject in arithmetic or grammar which the majority of the class readily grasp, they do not understand, and if given no extra attention go on to the next subject with only a hazy idea of the one just passed. In the ungraded room with fewer pupils they have the opportunity of personal attention and are very helpful to the teacher by frankly stating what they do not understand. In some ways this is the most discouraging part of the work, as there are some pupils, notwithstanding our best efforts, who will never be equal to the average pupil in all subjects. We have had five children in our school from one family not one of whom could get a good understanding of arithmetic. In such cases one's only consolation is that they might not do even so well without our help as they do with it.

In this latter class the ungraded teacher sometimes finds pupils doing unsatisfactory work in a subject on account of some error, the righting of which puts them among the best. A fourth-grade boy could never get a correct result in his multiplication problems altho he knew his tables perfectly. Watching him I found he added *one* every time he had a number left over to "carry" to the next product, whether the number that should have been added happened to be six or eight. He was delighted to find where he made his mistake and that removed all his difficulty in multiplication and long division. Another, learning long division, constantly made mistakes in his subtraction, altho he never made a mistake in a problem given as a subtraction problem. When asked about it, he said that he always thought one had to subtract in some different way when doing a problem in long division. These are but examples of the mistaken ideas that children get, and the ungraded teacher working with fewer pupils has a much better chance of finding these mistakes than the regular teacher with a larger number of pupils.

These pupils are anxious to get aid and often ask for extra work to take home that they may bring it back in the morning for correction.

Number of pupils given special promotion and now doing regular work in advanced class: 4A, 1; 5B, 2; 5A, 2; 6B, 3; 6A, 2; 7B, 6; total, 16. Many are leading their class.

Number of pupils who, because of special help, were able to be promoted at the close of the first semester: 3B, 1; 3A, 9; 4B, 24; 4A, 7; 5B, 16; 5A, 9; 6B, 11; 6A, 20; 7B, 9; 7A, 15; total, 121.

VIOLET WHITWORTH, *Teacher*

WHITTIER SCHOOL

I submit the following report of the results obtained in our ungraded room for the first semester:

The total number of pupils taught is 121. The number of pupils receiving help in the various grades and thereby succeeding in making regular promotion to the next grade is 60. And the number of pupils receiving special promotion is 39.

The object in our building during the first term was to meet the immediate need of the pupils, enabling them to do their regular work more intelligently and thereby to make their regular promotion more probable. Phonics, reading, spelling, and arithmetic were chiefly the subjects taught.

The work has reached pupils ranging from the 2A class to the 7B class.

The original plan, and the one pursued for the first term, was to give help to pupils in the various grades who were weak in one or perhaps two subjects. These pupils reported to the ungraded teacher at a time when their regular work would be the least affected by their absence from their room. The classes usually varied from one to five in number, and were made up of nearly all primary pupils. It was soon discovered that large classes defeated the very purpose of the work by reducing the personal contact of the teacher.

The second term the plan was materially changed. The morning session was wholly given over to grammar grades and the pupils remained all the forenoon. The pupils were those over-age and those who with special help were able to make a special promotion. Arithmetic, language, and reading were the subjects mainly taught. Undivided attention, application, and perfect deportment became the law accompanying all these special privileges.

The pupils who took the work, especially those who were given the opportunity of making special promotions, grasped the opportunity with great eagerness and continued thruout with the spirit of earnestness. Within a few days a new light of purpose and intent could be read on their faces; this was very marked in some cases.

As a result, personal endeavor and application, mental alertness, and a new interest in school have been awakened. Standards for promotion must be carefully maintained by both teacher and principal and inestimable good will result to the individual child enjoying these opportunities given by the ungraded room.

ERNEST E. H. SCOTT, *Principal*

EMERSON SCHOOL

In my report to you on our ungraded room, I wish to state that no teacher in our corps is rendering greater service to the system than is our ungraded teacher.

In almost every grade, we have pupils who have come to us from other systems and who are perhaps equal in strength to the others of the class, but owing to some differences in the work pursued in different systems, these pupils need individual help along certain lines in order that they may work well with the class.

Not infrequently along the line, we have pupils who from various causes are behind their grade in one subject. The ungraded room furnishes the remedy in these cases.

Another case in which the ungraded room has proved of great benefit is that of the apt pupil who, by means of this assistance, is enabled to shorten his course to the high school.

Then comes the timid child, the child of peculiar temperament or disposition, and the nervous child, all of whom have received help in the ungraded room.

Owing to our ungraded room, the number of retained pupils in our school has been reduced at least 50 per cent.

MARY DYSART, *Principal*

DEPARTMENT FOR BACKWARD CHILDREN

The sphere of the preparatory school and the ungraded room has now been considered. These departments provide a place for the normal child who shows an appreciable variance from the class standard set. Some of these pupils are above the average child of their grade and some below, but all of them are capable, at least so far as we can determine in advance of a careful individual study, of moving eventually into and thru the high school, altho those in the lower stratum will require more than the allotted time. But there is still another group—a small one, to be sure—one in which the members are deficient mentally, some bordering on idiocy. Unfortunately, but few states have made provision for them. They do not belong in the mental hospital, and justice forbids that they be excluded from the benefits of the public school, until such time at least as the state provides for their care and training. However, these children have no place in the regular classroom. All are a direct hindrance to the progress of the other children and a few are a menace to the welfare of the other pupils. For their own sake and for the sake of their associates they should be segregated from the other children and brought together in an environment especially suited to their own needs. The course of instruction for such children must be quite narrow in its scope, and it should aim largely to give motor and sensory training. Whether the lower types should be taught reading, even if possible, is open to grave doubt.

A very conservative estimate places the number of feeble-minded persons under 21 in Salt Lake City with a population of less than 100,000 at least as high as 70 and the number is likely nearer 200. In this estimate I am including only the marked types of feeble-mindedness. The proportion is equally as large in other parts of our country and statistics show that the percentage is much greater in some places. Including all children that show three years or more of retardation, which condition is made the basis of classification by some clinicians, the number is greatly increased. It is estimated that in England and Wales one out of every 250 persons is feeble-minded and that the proportion of insane is nearly as great. The percentage in America is in all probability as large. Dr. Fernald says: "There are at least 200,000 pronouncedly feeble-minded persons in the United States. Of these, 16,000 are inmates of almshouses, while only 18,000 are cared for in special institutions."

Our department for mentally deficient children does not aim permanently to care for the lower types of feeble-minded children. Thru the combined efforts of the expert in charge, the psychologist, and the school

physician, we hope to be able to secure sufficient reliable data in each case to enable us to classify the children into two general groups—the imbecile and the moron. It is not likely that the lowest type—the idiot—will reach the classroom.

But the type of feeble-minded children classed as imbeciles has no permanent place even in the special school. It is evident that most, if not all, of these are hopelessly deficient. Their proper place is manifestly in a state institution established, organized, and conducted for their type only. It is hoped that our special department may help to crystallize public sentiment to such extent that a state legislature in the very near future will take cognizance of this great social need, and permanently exclude the imbeciles from the unfortunate privilege now enjoyed of commingling indiscriminately with the community at large.

Accurate and reliable statistical information compiled by eminent authority proves most conclusively that the feeble-minded perpetuate their kind in alarmingly increasing numbers and thus add unnecessarily to the social problems and the criminal records of the future. It is evident to the careful student that heredity is chiefly responsible for the appalling increase of the feeble-minded, including the imbecile and the idiot. Unless precautionary measures be taken in the form of segregation and permanent exclusion, society will ere long have a greater burden in satisfactorily adjusting conditions than can easily or comfortably be borne.

In attempting to care for the lower type the public school cannot meet the needs of society. The state must receive him and care for him kindly and tenderly during his natural life. Any attempt to care for the feeble-minded in an institution that is organized and maintained as a hospital for the care and treatment of the insane is not likely to meet with unqualified success. Sentiment in matters affecting human happiness cannot be ignored, and frequently it proves callous to cold reason.

That segregation and permanent exclusion will prove to be for the common good will be, I believe, generally admitted. But several cases showing the penalty of neglect are here cited.

A feeble-minded girl of only thirteen, whose being encompasses the unbridled sensuality of the degenerate and the cunning of the savage, has already polluted the morals of at least twenty boys, most of whom might otherwise have passed thru the adolescent period of their lives without the surrender of their self-respect.

Another but several years older has bequeathed to society two illegitimate children, both of whom appear to have combined in their natures the traits that distinguish an idiotic mother and a criminal father.

Two parents are known to their charitable neighbors as "harmlessly silly" but "well meaning." The father does the commonest kind of menial labor and thus earns a meager livelihood for his family, while the mother discharges apparently acceptably her domestic duties in their modest home.

Several sons have resulted from this union. In each case nature has imposed a woeful restriction on the mental capacity. Years of painful plodding on the part of the child and even more painful effort and patient devotion on the part of the teacher have brought a reward that approximates the attainment of a normal child at the end of the first year. Disciplinary problems with each of these children, whose subverted natures have been ruled and guided by a type of intelligence that apparently can be responsive to that environment only which appeals to the lower instincts of human nature, have been both numerous and various. Their possible acquisitions measured in terms of school work seem to be circumscribed by a little less than the first two grades.

And then the expense! Reckoned in the least significant form—dollars and cents—it has exceeded several times that paid for equal advancement of a normal child. A greater cost has come in the lessened efficiency that results in a room where the subnormal child associates on terms of equality with the normal child. His presence cannot but have a depressing effect on the youthful aspirations of the other children. His moral standards—if he have any appreciable ones—are low and his presence contaminates. And then, after all, what has been gained? To the individual, it may sadly but truly be measured in negative terms. He may be, and in fact is likely to be, a less efficient member of society, because the school has attempted to do that which, from its very nature and purpose, it cannot do. And the school itself in its vain attempt to accomplish an impossible task has sustained a loss that cannot be designated as a negligible quantity.

The older of these boys are now approaching manhood, and unless their unfortunate tendencies fail to assert themselves in what seems to be the natural way, the greatest cost is yet to come.

With the commitment, then, of the imbecile and the idiot to a state institution, the department for backward children has a field rich in promise in the training of the moron, or higher type of feeble-minded child. The scheme of instruction or "treatment" must embody within its scope a careful and thoro individual study of the history of each case by the trained expert with a view to prescribing a line of instruction or treatment (possibly surgical) calculated to remove or at least to lessen the cause of the deficiency. In our experience some cases have been so completely "cured" as to justify transfers back to the regular classroom and others have had their capacity for development so greatly improved as to render the services of the special school quite effective.

In the consideration of environmental causes of some lighter types of mental deficiency, comparatively few in number and practically all responsive to the right kind of training, I am constrained to place an indictment against the school.

Is mental deficiency of the lesser type a by-product of the American school? To some degree at least, and in a very serious way, this seems to be true. First, in a negative way, as a kind of sin of omission, the schools

seem to be responsible, by failing to provide possible and practicable educative means readily at hand for the elimination and lessening of mental deficiency; and secondly, in a positive way, as a kind of sin of commission, the schools seem to be responsible, first by refusing in an aggressive way to permit the child to obtain at will the kind of training which might stimulate normal mental development, and, second, by forcing upon the child a kind of training which by its very nature is mentally stunting in its necessary effects.

The first phase of the problem here suggested has to do with the child who is of recognized normal mental capacity, but who is just enough below the average in mental ability to be habitually unsatisfactory in scholarship and occasionally failing to pass in his class or grade—altho at the same time he may show continual progress under regular class instruction, however slow or even sluggish it may be. Many of such children, who possess normal mental capacity but display subnormal mental ability, have been brought up to grade, to a standard of satisfactory scholarship, by means of individual instruction and attention.

The second phase of our proposed problem has to do with the child, not of recognized normal mental capacity, but with the child who is apparently subnormal in mental capacity—the child who is not only mentally deficient but who is seemingly mentally defective—the child who is practically at a standstill in school progress, and who is incapable of being restored to normality even by the individual instruction of the ungraded class.

This class of children may include some of the lower grades of the merely backward type, but, in the main, is made up of what is now coming to be termed the high-grade feeble-minded, or "moron" class of mentally deficient children. They are to be found stranded in the lower grades, anywhere from the first to the fourth grades; occasionally, because of size and age, they are permitted to be in the fifth grade; in rare instances for the same reason they are allowed to sit in the sixth grade.

Suppose that a child of normal mentality were retained in the kindergarten, year after year, from four or five years of age until twelve or fourteen years of age. What would, manifestly, be the result? Associating with little children, being treated as a little child, and consequently thinking, feeling, and acting as a little child during a period of several years, the pupil at first thought could scarcely be imagined as turning out in any other than one definite way; namely, stunted in general mental development. Should not his habits, thru years of repetition, become so crystallized into permanent traits of character as to present a case of extremely retarded development? Would not his reactions be the same as those of a typically high-grade feeble-minded child?

Upon further consideration, we might say that the result in our illustration would vary more or less according to the nature of the environmental

experiences of the child outside of his long detention in the kindergarten. But, supposing that these experiences were about the same as those of an ordinary kindergarten child—playing with children of kindergarten age, doing the things that kindergarten children do, and treated by adults as kindergarten children are treated—then could the outcome possibly be other than that indicated?

Have we not here an essentially homologous case as compared with actual cases of mentally deficient children who are for long periods detained in primary grades, with primary children, and under primary treatment, until they become of grammar-grade age and even of high-school age? Were children of normal mentality thus detained in primary grades, would not the necessary result be the same as in our illustration, or, if any difference, would it not be only quantitatively different and not qualitatively different? Would they not in their youth be childish, foolish, or children not grown up, as, indeed, the defective child of arrested mental development really is?

Is it not possible that many so-called defective children at the beginning of school are subnormal only in the fact that they have not the same degree of aptitude for scholastic learning as the ordinary child; or in other words, that they have not the native memory retentiveness for the symbols of language and number? And, furthermore, is it not possible that most of the other traits of mental defectiveness, such as poor judgment, lack of initiative, weak power of concentration, want of serious purpose, indifference toward the responsibilities of life, extreme credulity, simple and indiscriminate responsive affection, and other such qualities as are habitually displayed by the childish, the foolish, the feeble-minded—is it not possible that some of such traits are merely the outgrowth of their detention in the primary grades where the normal habits and attitudes of little children become crystallized into permanent traits of character?

Let us suppose that a child of normal mentality, beginning school at the ordinary age, were forced thru all the branches of the common-school curriculum in four years instead of the customary eight. What would, manifestly, be the result? Could it be anything else than a chaos of scholastic mental confusion, as would be expressed by the most absurd and pathetic mixtures of half-assimilated memory facts?

Is it not possible that some of the mentally defective children in our schools are also largely the outgrowth of an ill-adapted course of study thru which they are taken at a rate and in a manner totally out of harmony with the developing nature of the "unusual" child, or the average child? Let us keep in mind that the defective child is from the beginning in a class that is in scholastic advance of his own mental development; and thus in the regular classroom he continues during his entire school life to be improperly classified.

This discussion leads us no farther than to the somewhat reasonable

conclusion that some grades of mental deficiency may, in part at least, be the products of wrongly adjusted courses of instruction; i.e., courses wrongly adjusted for subnormal children.

Be it observed, however, that this reasonable possibility is not claimed for all cases of mental deficiency in the schools, nor is it claimed, at present, for any particular percentage of the subnormal children. On the contrary, it is readily to be admitted that there is unquestionable and abundant evidence that certain cases of mental defectiveness in the schools, particularly those bordering on imbecility, are the products of hereditary influences, or generative conditions, or traumatic injuries, or other causes entirely foreign to the school; and that the defectiveness thus caused continues incurable whether the child attends school or not.

In the fall of 1910 the head of the department for backward children in the Salt Lake City schools made a preliminary survey of conditions in the schools, spending two months in the work of examining all extreme or serious cases of pupils whose retardation had been observed by teachers and principals. As a result of this investigation, several notable things were discovered. One observation in particular, which seemed to be a distinct contribution to the problem of mental deficiency, was this rather surprising condition: Mental deficiency in any individual is evidently not integral; it is fractional. That is to say, contrary to the generally accepted theory, it was found that the mind is not defective as a unit in its sociological reactions; and that, on the contrary, the mind might be extremely defective in one field of sociological reactions and at the same time entirely normal in other large and complex fields of sociological reactions. For example, a child might be arrested in school progress and be extremely defective in scholastic ability, but, at the same time, such child might be normal or even supernormal in social development, or in vocational ability, or in ethical habits, or in religious sentiments.

From the observations made, it seems unfair to say that a child is mentally deficient, when in fact he is only scholastically deficient, and when he might have normal or even supernormal mentality in other fields of sociological adaptation.

Later in the school year 1910–11, a more intimate acquaintance with the subnormal children, thru personal contact with them, as a teacher of special classes, revealed a possible explanation as to why there appeared to be no uniform relation between development or retardation, scholastically, vocationally, socially, ethically, and religiously; and also revealed a possible explanation as to how the school might be the cause of mental deficiency in some cases and in other cases of subnormality have little or no injurious influence.

In his report to my office the head of this department says:

> It was observed that the most pronounced cases of mental defectiveness in the schools, and those whose deficiency came nearest to affectin the mind as a whole in all of its

psychological and sociological reactions were, as a strikingly general rule, those pupils who had been the longest in school, the most regular in attendance, the most industrious in their efforts to learn, and the most trustworthy in deportment. And, on the other hand, it was observed that the less pronounced cases of mental deficiency in the schools, i.e., those that, while being defective scholastically, came more nearly to being normal socially and vocationally, were those pupils who (1) had been very irregular in school attendance, or (2) had practical vocational experiences outside of school, or (3) had been incorrigible and mischievous while in school.

Thus it appeared that mental deficiency among subnormal children varied directly with the extent to which they came in contact with the school—mentality being inversely proportional to the environmental influence of the school—and the degree or extent to which the school seemed to retard mental development being measured by the ratio which the influence of the school bore to environmental influences outside of the school.

Personally, I have been unable yet to confirm these rather startling statements, but they are made by a careful, conservative, and capable department head.

In conclusion, I may with propriety say that school systems which still hold exclusively to the method of "mass" instruction, and provide no means for individual attention for the pupil of habitually unsatisfactory scholarship, are culpably responsible for an educational waste, because they fail to utilize the practical and inexpensive means readily at hand for the elimination, or partial elimination, of this milder type of mental deficiency.

In the process of adaptation necessary for effective teaching, the course of study must adjust itself to the child and not the child to the course of study.

E. A REORGANIZATION OF OUR SCHOOL SYSTEM

J. H. FRANCIS, SUPERINTENDENT OF SCHOOLS, LOS ANGELES, CAL.

In the interests of economy I am convinced that the best results may be obtained by a brief and direct description of what we are attempting to do in Los Angeles in the way of reorganizing our school system.

It is to be understood that the plan is not to be dubbed the Los Angeles Plan. I do not know how many other cities are attempting the same things and with what results. Recently someone mailed me a copy of an address by Edward Van Dyke Robinson, University of Minnesota, on the reorganization of the graded and high schools. I did not learn who this kindly disposed but unkind friend was. Since reading it I am certain that I shall practice plagiarism in this paper and upon future occasions. In fact I discover that either he or I have been at it in the past, for I might well content myself with calling your attention to his address which has been published in pamphlet form and which fully covers the points involved in this discussion.

OUR PLAN

The plan toward which we are working in our city, broadly speaking, follows:

1. One to two years in the kindergarten. Our state law compels the admittance of children to the kindergarten at a tender age, a prophecy of the days when the nursery shall become an integral part of the public-school system. This ofttimes results in a child's spending more than one year in the kindergarten, and in turn raises serious questions concerning kindergarten methods and content of work.

2. Six years in the elementary schools, assuming responsibility for the physical, mental, and spiritual development of the child between the ages of six and twelve. Because of economic and social conditions and principally because of the wicked folly of educators hiding behind the gray old fallacy of conservatism, this age limit too frequently reaches thirteen, fourteen, and even fifteen, thereby robbing the individual of the most sacred things in all the worlds that be—his hidden pride and confidence in the efficiency and power of his own personality. Fortunately the boy, for it usually is a boy, finds some sort of deviltry in which to give expression to this personality and thereby retain a portion of it which his good sense may later lead him to turn into legitimate channels.

3. Three years in the intermediate or junior high school, which, if the child has been fortunate, submissive, and not too individualistic, may be completed at the age of fifteen, covering nine years of school work.

4. Five years in the high school, which brings the student to the age of twenty, a good average age to begin the business of life despite the philosophy of my friend President Benton who holds we should remain infants until twenty-one years old.

SUPPLEMENTARY ORGANIZATIONS

This general outline of work designed to meet the needs of the largest number of American boys and girls is supplemented by:

1. The trade school, admitting pupils according to physical development irrespective of academic attainments.

2. Continuation schools open before and after school hours, offering work in manual subjects and optional with the pupil. This work we hope soon to enlarge and include in it music, art, mechanical drawing, and public speaking.

3. Vacation schools during the summer months, open in the forenoons and designed to conserve two purposes: (*a*) to occupy the time of younger children in music, folk dances, play, gardening, natural language work, drawing, and manual arts. Since this is development work, no effort has as yet been made to join it onto the regular system, which, if it ever was meant to be developmental, has degenerated into a scramble to furnish the child with an education by passing him from one grade to another until there are no more grades to conquer; (*b*) to furnish regular academic work for those who wish to make up previous failures or secure the coveted official certificate in subjects yet to be taken before they can be vouched for as

educated young men and women. Since this work is both uneducational and undevelopmental, it adjusts itself excellently to the regular scheme and has great advantages as a time-saver and hope-preserver. Many pupils return to school in the fall with new courage because they are up with their classes and can see the end ahead. These schools also keep pupils off the streets and out of more unprofitable occupations and save the city money in carrying them an unwarranted length of time in the school system.

4. Night schools for all grades and for all classes of people. But few phases of our school work have greater significance than this one. Purpose upon the part of the individual pupil, so lamentably lacking in the regular school, is a prominent characteristic here. If this nation has one prevalent danger it lies in the number of her school children passing thru school just to be passing thru, wholly lacking in intelligent or worthy purpose.

5. Special schools for the unsocialized individual who refuses to adjust himself to the regulations, formalities, and conventionalities of the schoolroom. These schools are the eddies into which the driftwood of the school system may gather and be treated until sufficiently seasoned to risk again in the educational current. They are necessary and strikingly convenient.

6. A liberal use of the ungraded room, which is but a tardy recognition of the fact that since some children will differ in essential particulars it is folly to subject them all to the same educational treatment and expect them to assimilate all its ingredients with equal facility and profit.

7. The social center, not yet a year old but a very promising educational youngster.

SIMILARITY TO THE GERMAN PLAN

Similarity of this to the German plan is to be frankly conceded, which leaves a beautiful opening for the American patriot to orate on the virtues of the American and the defects of the German system. The German system, however, should not be adopted for our needs but adapted to them. There must remain one fundamental, vital difference between the present German and the future American plan. The latter must have no blind alleys, and her educational cross-roads joining the main highways must be kept in as good condition as the highways themselves. This becomes possible with the assumption that the coming generation of American educators will cease to be frightened at the imaginary chasms between these highways, and discover that a good traveler who has been moving on his own steam upon one will need fear no great hardships or difficulty in traveling on any other. This also suggests the other significant difference—American vocational schools can no more afford to sacrifice the so-called liberal studies than can academic schools afford to eliminate constructive and applied work.

THE INTERMEDIATE OR JUNIOR HIGH SCHOOL

According to the topic printed on the program this paper should concern itself principally with that part of the school system covering the work

of the seventh, eighth, and ninth grades done in the organization known as intermediate or junior high school. At present we have five such schools in Los Angeles, enrolling approximately three thousand pupils. We expect to increase this number until all the pupils of these grades shall be accommodated in schools of this character. Four of our intermediate schools are five months old and one can boast a year's experience. Three uniform courses are offered in each of them: a general course, a commercial course, and an elementary industrial course. These courses are planned with two classes of pupils in mind: (*a*) those intending to enter the high school and (*b*) those electing to leave school at the end of the ninth year. Both are given full tenth-year standing in the high school.

In attempting to plan work for these we also concern ourselves with the individual independent of what he intends to do or where to go. This, of course, is the age-old problem and the fundamentally important one, likewise the one most poorly solved.

In the seventh year one option and in the eighth and ninth years two options are allowed out of a group of six or seven studies.

WHAT IT WILL ACCOMPLISH

For the pupil going thru the intermediate school we expect to accomplish the following:

1. An ability upon his part to do some thinking that may be more or less his own, probably less. We concede that this is ambitious and may have to be content with limited results. Slight results, however, will be refreshing and give hope. Doubtless American boys surpass those of all other civilized countries in their willingness and ability to do things and in their unwillingness and incapacity to think logically, consecutively, and deeply. In this latter the American boy is surpassed, if at all, only by the American girl, with honors close. The cause is easy to discover. The system and not the child is at fault. We have been asking the pupil to recite what he has just read from the pages of a textbook that never should have been published and never would have been save for the money there is in it. The lesson begins on page ten and ends on page twelve and except for these pages it begins nowhere and ends at the same place. The pupil's passing thru the grade rather than passing the grade thru him has been emphasized until it has become the main problem. Since this is accomplished thru satisfactory recitations, the stereotyped, formal, and deadening recitation in turn has become the important activity of the average schoolroom. Real thinking is of minor consideration. The time, energy, and life wasted in recitations in the American schoolroom would serve as the comedy of the ages were it not the tragedy.

It might be legitimately asked how the intermediate school can improve upon the grade schools in inducing pupils to think. The reply must be qualified, but a specialist who is supposed to think more deeply on his

particular subject must be conceded to be better prepared to lead his pupils to do the same.

2. To accustom the pupil to departmental work and hence to prepare him for high-school methods. The educational death-rate in our ninth year or first year of high school is alarming. This again is easily explained. The pupil who has enjoyed the maternal care of a conscientious teacher who knows his strong and weak points and is equally well known by him enters a great high school and becomes lost. There is no one to look after him to tell him when to get his lessons and how to conduct himself. The change is too sudden and too violent. He fails, becomes discouraged, and drops out. Our experiment so far has resulted in 18 per cent of ninth-year intermediate pupils failing in one or more subjects as against 42 per cent in the same grade of our high school.

The pupil in becoming accustomed to, also enjoys the advantages of, departmental work. These are incomparably great compared with the old plan of one teacher for the entire curriculum. The mother-teacher idea belongs to the pre-adolescent child. Adolescent boys and girls are entitled to learn from those who are masters of what they teach. This is impossible when one person is required to teach arithmetic, geography, history, literature, language, science, penmanship, music, art, ethics, hygiene, agriculture, needle-work, etc., the *et cetera* to include those subjects which may have escaped my memory. Specialists and specialization offer serious problems in education but they are not hopeless ones, as are those presented by the unprepared teacher. Teachers are not at fault. They are the victims of a system that demands the impossible of them. Nor can departmental work be brought to its highest efficiency under regular grade-school conditions. On account of lack of numbers of equal grade, diversity of interests running thru so many grades, intricacies of programs, and attitude of principals and teachers, departmental work in the grade schools meets with unnecessary difficulties.

3. The intermediate school conserves the time and interest of the pupil. Six years is sufficiently long for the mastery of the arts. The last two years of grade-school work occupies itself naturally with repetition. An attempt has been made to enrich these years by the introduction of new material. The result has been an educational hash. The number of young people lost to the schools, thru lack of interest in their work caused by repetition or by work superficially done, is a startling commentary on the wisdom of school men and women. The adolescent youth begins to inquire, reason, and judge, and he must have material upon which these qualities of mind may feed.

Of all the inexcusable follies to be chalked against us as teachers, possibly that of compelling the child to repeat the work of an entire grade because of failure in one or more subjects is the most glaring. It is possible to avoid this in the grade schools, but inconvenient. This inconvenience

is the main cause for the practice, altho it is not conceded to be so. In the intermediate school the practice disappears naturally and necessarily.

I do not hesitate in the belief that under a well-organized system of intermediate schools children will finish the ninth grade at least a year ahead in development, possession of knowledge, and the power to acquire it, of the ninth-year pupil under the present plan.

4. The intermediate school offers to the pupil an equipment and organization not possible under the grade plan, such as science laboratories, well-equipped shops, art and mechanical drawing-rooms, cooking- and sewing-rooms, commercial rooms, music halls, gymnasiums, auditoriums, etc.

5. These schools should develop in the individual social- and self-responsibility at an age when responsibility to society and to self become most important. The theory that the older and stronger pupil of the school should look after the interests of the younger and weaker one is beautiful. It has one serious defect: it does not work. The facts are that the farther our school children progress in the system the less they seem disposed to assume any responsibilities. We are sending out armies of boys and girls, men and women, possessed of the spirit of getting what they can and giving as little as possible in return, the spirit that in social, political, and economic life is a menace to the nation.

Student-government and other student activities should be organized in the intermediate school to offer opportunity and encouragement for the giving of self to a legitimate and worthy cause. Our young people must be taught that it is more blessed to give than to receive.

Too much is being attempted for the child, too little by him. Too many safeguards and restraints, too much protection, advice, and guidance will not result in a race of men and women with the mettle of our fathers and mothers. They developed the real stuff within them thru early sharing the responsibilities of life and playing their part in the game. Somewhere below the university and below the high school we must lead the individual to recognize the fact that the world owes him just what he is worth to the world and he owes himself just what he is worth to himself. This belongs to the period of adolescence, but is very difficult to develop effectually in a school where the pre-adolescent child greatly outnumbers the adolescent. Our grade schools are usually dominated by the atmosphere of the child-world or the world of men and women. It is a rare corps of teachers with a rare principal who succeed in harmoniously blending the two worlds. Much of the lack of interest in, and the dissatisfaction with, his school and most of the bluff and bluster of the average eighth-grade boy are due to his environment which is not in harmony with his nature. The average eighth-grade girl is equally, tho perhaps differently, affected.

6. The intermediate school offers opportunity to secure men teachers for its pupils. As this convention is composed largely of men I leave it to

you to pass upon the merits of the proposition. It should be noted, however, that the plan does not exclude women teachers, and while teaching is not a sex problem it will be conceded that so long as men and women differ widely in their experiences the adolescent mind should come in contact with both the masculine and feminine viewpoint. This is necessary to insure the mental balance of the individual pupil.

7. The intermediate school concerns itself with the child not going to high school. The American high school has grown within the last decade to become the greatest educational institution in the world, largely because it has been compelled to concern itself with the interests of the pupil not going to college. He was the more important because there were more of him. The intermediate school in the next decade will be doing for the boy and girl not going to high school what the high school is now doing for the boy and girl not going to college. It will then surpass the high school in importance because of numbers benefited. The high school in its efforts to care for the boy and girl not going to college has increased the number of college students many fold. So will the intermediate school increase the high-school enrollment. The colleges are coming to recognize that the high-school pupil who is prepared well to leave school at the end of his course is well prepared to continue work in college; so will the high schools discover that the intermediate pupil who has given the most thought to, and taken the greatest interest in, his work is best prepared to meet the requirements of the high school.

The inquiry will probably be raised here of what can be done for the child in the intermediate school to prepare him for life. The reply is anything the system and teacher are prepared to do. The limitations are not in the pupil but in systems and teachers. If the psychologist challenges the statement, I would call his attention to the growth of education during the last quarter of a century, in which time we have witnessed the high schools advancing far beyond what the colleges were then doing and the colleges and universities occupying fields then unthought of. Even the grade schools, in music and art, have far surpassed the dreams of the university enthusiast a quarter of a century old, if there were any at that time. To say that we have reached the limit of the child's capacity is to indulge in academic twaddle. We may be reaching the end of his capacity, but which end?

8. The intermediate school offers opportunities for the child to find himself. Possibly no greater service can be rendered to him by the public schools. Certain it is that too few do find themselves in their school days and too many of these do so too late to take advantage of all or much the schools have to offer them. The belief that young people are not prepared to decide upon a vocation until they have finished college is dangerous and wasteful. The young people of this country must know earlier what they are to do in life and prepare to do it. Whether they afterward do it or not

is of minor importance compared with what they become in preparing to do it.

A system of education that is worthy of the time, effort, and money spent on the American schools should be one of widest possible opportunities in which young people may discover their best qualities and powers. It should also induce them to develop and exercise these powers in the service of mankind.

Vocational advisers may be helpful and even necessary but vocational subjects properly presented offer a safer guide to young people in making their choice. These can be given with but limited success in the grade school; the intermediate schools furnish excellent opportunities for their introduction.

THE INTERMEDIATE VERSUS THE SIX-YEAR HIGH SCHOOL

The intermediate has distinct advantages over the six-year high school which proposes to admit pupils in the seventh year and carry them thru the twelfth. In some of the smaller districts where they are erecting expensive high-school buildings to accommodate a small number of high-school pupils it would seem best to organize the system on the six-year high-school plan. In the larger cities, however, where high schools are usually crowded and almost uniformly too large in numbers, the intermediate-school plan is better. The transition from grade to departmental work should be gradual. This is one of the important problems of the intermediate school, where it can be better worked out than in the large high school with other problems of its own. High schools have not solved the transition problem between the eighth and ninth years. To make the break as violent between the sixth and seventh as it now is in the ninth year would be adding to our difficulties.

Seventh- and eighth-grade pupils are too old to associate in school with first- and second-year children but too young and inexperienced to work on an equal footing with eleventh- and twelfth-year pupils.

In most states children are compelled by law to remain in school between the ages of six and fifteen inclusive. A school, therefore, that completes its work with the child at the age of fifteen is a logical unit in the public-school system. Its business will consist in the solution of problems raised by pupils of these grades and this it can do better than the large high school which is more interested in other problems.

The item of transportation to high-school centers and the unnecessary dangers to which young people would be subjected in traversing our large cities argues strongly for the organization of intermediate schools within walking distance of practically all its pupils.

To include the ninth year in the intermediate school insures an additional year's schooling to a large percentage of public-school children. Having finished eight years of work, they will remain the additional year

to graduate with their classes and complete the courses they have undertaken. If they were admitted to the high school in the seventh grade the temptations to drop out of school earlier would be stronger.

The three divisions of the school system are physiologically, psychologically, sociologically, and logically correct. The present organization of eight years in the grades and four years in the high school violates the principles of all these sciences.

THE INTERMEDIATE AND EXTENDED HIGH SCHOOL

The intermediate school assumes its true significance only when considered in connection with the extended high school. With but six years given to the mastery of the arts and the remaining eight years to the development of the individual and his preparation either for junior college work or for a definite vocation in life, our system of education opens up tremendous opportunities and possibilities for the school children of the country and will make returns for the nation out of all proportion to the additional cost necessary to operate it.

TOPIC: THE DETERMINING OF SCHOOL EFFICIENCY

A. THE VALUE OF THE EDUCATIONAL COMMISSION IN DETERMINING THE EFFICIENCY OF A CITY SCHOOL SYSTEM

CALVIN N. KENDALL, COMMISSIONER OF EDUCATION FOR NEW JERSEY, TRENTON, N. J.

The attempt to determine school efficiency by means of commission investigation is the most recent method of answering two questions: What return is the community getting from its investment in the schools? How can the investment be made to yield greater returns?

The movement to test efficiency in this way has by no means become widespread. So far as I know, the schools of not to exceed half a dozen municipalities have been examined and reported upon. The investigations have been carried on within the past eighteen months.

The data are consequently both insufficient in amount and too recently gathered to afford sufficient information upon which to base definite conclusions as to the real or ultimate value of such investigations and reports. Nevertheless, a consideration of the value of commission reports is worth the attention of this department, even tho the discussion must be largely academic or theoretical, rather than pointing to what has already been accomplished. A consideration is worth while because signs are not wanting that such investigations will gradually become more common. What are these signs?

First, public interest in education is growing, as evidenced by the increased amount of public discussion concerning it. A generation, itself

educated in the schools, is bound to ask questions about the schools of the present day. It would indeed be a discouraging comment upon the schools of the past if it were not so.

Second, there is increased confidence in the possibilities of the schools, as Dr. Eliot has pointed out. "Democracy is looking more and more to the schools to make things go well in this country."

Third, public education is becoming slowly but surely a more serious business. Efficiency tests are likely to be demanded at a time when "efficiency" seems to be the popular catchword. This is an age, too, of increasing publicity in regard to all public affairs. The educational statistician is abroad. His figures throw light upon certain phases of efficiency, and are of use so far as they reveal measurable conditions. In this practical age there is sure to be a search for tangible results of educational processes. But is it too much to affirm that there must remain some vagueness and uncertainty in ascertaining the results of education? In the realm of the intellectual and spiritual, with which education has so much to do, there is a very large residuum, the value of which cannot be measured by figures and tables.

As a result of my observation of teachers in action in many schools, I am skeptical of finding, by any known test or commission report, a definite measure of the value of much of the teacher's real work. The factory is one human institution, the school is another. The value of the output of one may be determined in the office, but the whole measure of the other institution, the school, cannot be so measured.

With this qualification, the educational commission affords a means, available to every community of considerable size, of reaching conclusions regarding the efficiency of its schools; measured, first, by what figures and tables may show; second, by the extent the administrative methods, the organization, the course of study, the schoolhouses and their equipment, are in accord with what has come to be widely accepted as the standard for American schools, so far as there is a standard; third, by observation of the teaching, and, speaking somewhat vaguely but nevertheless confidently, the general spirit of the schools.

I am of the opinion that school superintendents should not look with too great suspicion upon this movement, or regard it as another means of making their work more hazardous than it is. Broadly viewed, the educational commission should not be regarded as a club to be wielded in the hands of the enemies which every capable superintendent sooner or later makes.

Investigation may be of constructive value in two ways. In the first place, it may reveal to the school board and to the public the strong points of the schools—features which are locally unknown or unappreciated. In the second place, it may point out the desirability of certain improvements or changes, which the superintendent has perhaps urged in vain upon

callous boards or an indifferent public. For example of the first, in Baltimore the Commission last spring found much to commend in the well worked-out and extensive plan of grouping in special classes or schools particularly able pupils. For example of the second, the Baltimore Commission reinforced the recommendations of the superintendent, that the schools needed additional supervisory officers.

In East Orange the report pointed out to the community that the grammar-grade children are excellent spellers. It also pointed out that "there should be a more thoro systematization of the work of the Board of Education, the superintendent of schools, and the other officers of the system, such as shall specify the functions and responsibilities of each," a matter which the superintendent had before strongly advocated.

The report of the commission may be valuable, in the third place, by pointing out the need of more money for the schools. The Baltimore report showed that of the cities of its class in population, the expense for schools was less in Baltimore than in the other cities. The Montclair report stated that it is false economy to save money temporarily by doing without satisfactory playgrounds. "Ultimately," the report goes on to say, "the city will find it necessary to provide them at a greater cost; and meanwhile the children must go without the really indispensable education playgrounds afford." The Boise report showed that the term of service of teachers in that city was altogether too short, and this due to inadequate salaries.

I am of the opinion that the investigation and report should not overlook a consideration of the influence of any general political agencies that may be at work in the community to undermine, impair, or overthrow sound educational policies for the development of the schools. These agencies may be found among members of school boards, or among politicians outside, or even, unfortunately, among a minority of the teachers themselves. The existence of these agencies may be unsuspected by the community. If they exist, the commission, from its own independent position, might well give voice to its convictions on the subject.

The activities of a system of schools are now so varied, so complex, so extensive, that some of these, in the best schools, are imperfectly carried on. This same imperfection is true of railroads, manufacturing establishments, department stores, scientific farming, and every organized human endeavor. It is true of the best of these, and managers are on the lookout for improved methods.

So, likewise, it should be with the schools. In fact, an increasing number of superintendents are studying the problem of increased efficiency.

The commission, from its independent study of conditions with an unprejudiced point of view, may be able to enlarge the vision, clarify the views, and recast the opinions of superintendents in respect to some of the many-sided activities of his work.

In my judgment, the commission should not neglect to touch upon the most important factors which contribute both to school efficiency and to school inefficiency. The list of these factors is a long one—the dangerous conditions of buildings in respect to fire, pointed out in several reports of commissions already made; the inadequacy of playground space, also pointed out in more than one report.

Other matters to which attention has been called in reports are as follows: imperfect light; slovenly school buildings; absence of constructive, inspiring supervision; failure in the rules to give the superintendent adequate power in the appointment of teachers; low salaries in comparison with other cities; far too numerous changes in the teaching corps; the retardation of pupils; the overcrowding of rooms, usually in the primary rooms, where the children are docile enough to stand it; lack of professional attitude on the part of teachers; the lack of provision for backward or subnormal children by means of special classes; measures to promote health; provision for industrial training; the adaptation of the life of primary schools to child life; the quality of teaching, so far as there may have been opportunity to observe it; the spirit of the teachers as affected by the quality of the supervision; freedom in the interpretation of the course of study; the interference of board members in the work of teachers, in the promotion of teachers, in the general morale of the teaching corps; the amount of home study; the relations of parents to the schools; the equipment of schools, not overlooking the seating; the abuse of the examination system; the course of study.

It is conceivable that the extent of a comprehensive survey may reveal to the board, for the first time, the nature and extent of a modern school system, and may afford to the public a glimmer of the many-sidedness of the work of a superintendent.

The report should commend the achievements of the schools. The public needs education in this direction, as well as in the direction of still greater achievement in the future.

The following is taken from the Baltimore report:

> The net result of our inquiry into the system of education is an opinion favorable to that system. While we find much to criticize adversely, we have taken into account the historical development of the system and its very moderate cost at the present time. In view of these considerations, we are justified in rendering a report which in its main outlines is positively favorable. With reference to any school system the important thing is not so much the question, What is its present status? as that other question, Is it moving in the right direction? It is clear to us that, under the charter of 1898, in spite of certain particulars in which changes are still called for, the general movement in Baltimore has been unmistakably in the direction of improvement. We have, in fact, been repeatedly struck with admiration for progress which has been made in the face of more than ordinary difficulties.

While the report in certain particulars may reflect upon the judgment of the superintendent, or upon some policy of his, yet a strong man need

not fear this. The day is past when any educational system is regarded as perfection, or any man or set of men as having said the last word in education.

Much depends upon the manner in which the commission is appointed, or rather at whose instance it is appointed. The superintendent may indeed take the initiative in securing the appointment of the commission. Obviously it is much the wiser course for him to take the initiative than to have it taken by hostile influences in the community. The former course was taken in one of the small cities of the country, where the superintendent felt that certain conditions might be made better, but he needed the support and testimony of outsiders. He had the confidence of the leading commercial organization of the city, as well as that of the Board of Education. The commercial organization was induced to finance the expense, and the board agreed to co-operate. With this unusual combination of superintendent, school board, and commercial club all working in harmony, the subsequent report was received with much interest and confidence. The community was unusually enterprising. The commercial club was far-sighted enough to realize the value of good schools in making the city more attractive as a place of residence. The result was that all the recommendations made in the report were adopted by the school board, and the superintendent, strong from the outset, became stronger still because he had initiated a plan to bring in outside views or counsel.

Much depends, too, upon the character of the man or men on the commission. Obviously the commission should not from the outset be antagonistic toward the superintendent. On the contrary, it should be sympathetic toward the complex work of the superintendent.

What have been the tangible results of commission reports cannot be affirmed, because, as stated earlier, there is too little evidence yet available. In Baltimore conditions have been such as to preclude a serious official consideration of the main features of the report. The neglect of the report thus far in that city should not be taken as evidence that reports elsewhere would be treated in the same way. In Boise, on the other hand, all the recommendations were acted upon favorably within a brief period after the report was submitted. Conditions in the two cities are very different. One of these is the fact that one city is large and the other small. A large city school system is likely to move more slowly than a small one, even if all other conditions are the same.

How to turn an expert interpretation over into an unquestioned acceptance by public opinion is not an easy matter. Most of us know that reforms in educational practice do not go on by leaps and bounds, but by slow degrees. The suggestion is offered that after a report is submitted, it would be advisable for the commission to meet, in a series of conferences, the school board, the administrative officers of the system, the principals, the commercial organization, newspaper editors, and other leaders who

have the power to shape public opinion and to get action. People who are singularly averse to reading reports may be interested in a public discussion conducted by the makers of such reports. The report must be got by some means into the public consciousness after its submission. It should not be pigeon-holed.

Even tho there be no visible results of its activities, the work of the commission nevertheless may be positive and definite. It may be serviceable to other and even distant communities. It may confirm the educational convictions and revise the standards of the more thoughtful among the teaching body. Such a result alone is worth while. It is too much to expect that such reports will all at once recast public opinion or immediately revolutionize the action of school officials, but unless educational conditions in a city are unusual, the report of a disinterested, capable commission will be valuable in shaping educational policies.

B. THE RELATION OF AN URBAN COMMUNITY TO ITS PUBLIC-SCHOOL SYSTEM

MARTIN G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

Public education is the state's effort to promote and to provide efficient citizenship. It best accomplishes this necessary result by training each separate individual in its citizenry to co-operate most freely and fully with all other individuals. The state, for the ends of democracy, commits to the school the solemn and sacred service of fitting the child to do his part for life in that great social and civic activity which we usually think of as government in its broad sense. The individual can play his part in this organized game of life only so far as he is given such knowledge of the game as to enable him to play it understandingly and cordially. If to this is added the fact that the individual is by birth a member of the committee on rules, intrusted with the power to amend the rules of the game from time to time, it is manifest that the fate of this thing we call government is conditioned upon a proper preparation of each member of it to do his part in such manner as to promote the welfare of the entire group.

The essence of school training is co-operative and not competitive. It consists in giving to each member of the social group the common elements of a universally necessary education. These tools of democracy are the stable elements that must always lie at the heart of a school curriculum. The possession of these is essential to the life of democracy. The imparting of these is the business of the school.

So long as the school is the only social agency broadly at work in a community and the life outlook of its pupils is only to a career of individual industry, one has a rural situation. Education here is a relatively simple process. But when the school is set in a great urban community in which all activities of the individual are trenched upon by a multiform and highly

organized economic situation, education becomes a vastly more complex process.

The school has definite and important obligations to an urban community. These I do not propose to discuss. But what is the relation of a great populous community to this institution set to fit its individuals for wisest relations to society? The function of the school is limited in scope by legislative enactment. In this restricted scope it is further limited by the financial support the community provides. Within the bounds of statutory law and local taxation, the school, as an agency of the state, must carve its career and define its function.

These limitations should always be considered by citizens, who in their zeal to broaden, and, as they believe, enrich the work of the school, insist upon incorporating into the school's activities certain reforms that are either legally or financially impossible.

These limits upon the school tend to make it conservative. Private initiative frequently outruns public policy and the school is made to appear as hostile to the progressive spirit of many good citizens. This situation is always possible in a great city, with its many divergent educational ideals and with its non-homogeneous communities. It is, however, wiser and better to be held by some as conservative than to be held by any considerable number in the urban group as extravagant and visionary. The issues of public education are too momentous to allow of radical experimentation. What then is the outlook?

The school plant, its physical appointments, belongs to the people, and should be freely used by the people for all sorts of educational activities that are not yet demonstrably within the range of the school. We are passing rapidly from the old and narrow idea that the school building is merely a place to educate children of a certain age in a defined way, to an understanding of the fact that schoolhouses are the people's forum—to be used by them for every wholesome intellectual, social, recreational, and moral purpose that makes for the common good. We are coming rapidly to the opinion that the school building should be open day and night for every legitimate use that the community as a whole can vision.

This newer concept of the use of the school plant in an urban community opens the way for substantially unlimited experimentation. There are many unsettled problems in the educational policy of a social democracy. Wise and public-spirited citizens, quite apart from the accepted procedure of the schools, may find in this newer use of school property a legitimate sphere of exploitation. This enterprise may take the form of public discussion or the vastly more promising form of public demonstration of those things which once proven to be educationally good may find permanent place in the scope of the school's legal and financial possibilities. Private initiative is thus given a definite relation to constructive educational procedure. It is saved the unfortunate relation of destructive criticism—a

relation that in general disturbs and does not promote the stable educational procedure of a great city.

In the immediate past or in the present private initiative has been most helpful in promoting in an intelligent way, and for the most part in public-school buildings, the movement to enlarge and to enrich the entire school activity of a city. And all this, be it remembered, may be done with the full sympathy and co-operation of those who by law are charged with the administration of the schools. It enables the citizen with a great thought to carry it to a successful demonstration and to see it finally made an integral part of the training given the children of the city. He has some incentive to devote time and money to his enterprise when the community regards with expectancy the issue of his enterprise. He has relieved the schools of an expensive experiment, promoted their effectiveness, and achieved a notable good.

On the intellectual side, private initiative can promote such important agencies as:

Home and school associations.
Free lectures.
Studies of racial groups.
High schools on a modern basis.
Schools for the mentally defective.
Schools for the mentally retarded.
Other special classes.
School gardens.
Vacation schools.
Trade schools and continuation schools.
Circulating libraries for pupils and parents.
Industrial education in the elementary grades.
Decoration of school buildings.

On the physical side it can promote such agencies as:

Medical inspection.
School nurses.
Special treatment of defective vision.
School visitors.
Zones of silence.
Orthopædic clinics.
Clinical care of children's teeth.
Mothers' alliances for the care of babies.
Treatment of the deaf and blind.
Outdoor schools for pupils suffering from incipient tuberculosis.

On the social side it can promote such agencies as:

Playgrounds.
Equipment of school yards.
Social centers.
Employment agencies for pupils leaving school.
Recreation centers.
Public baths.
Kindergartens.
Play carnivals.

On the moral side it can promote such agencies as:

Savings banks.
Parental schools.
Special classes for unusual girls.
Organized moral training.
Simple housekeeping.
Such other forms of volitional education as will result in securing to every child habits of right action, as surely as he forms habits of right thought.

The real friend of the state aims to confirm and extend these stable institutions of society, the church, the home, and the school. He is ready and alert to give time and money to the promotion of all legitimate progress in the social order. He is willing and anxious to try out in experimental form whatever bears the promise of help to childhood. He is always co-operative and constructive, and never cynical and destructive. He sends, half in hope, half in fear, the dove across the mist-hung waters, glad if on its return it bears the promise of better laws and loftier ideals for the training of citizens for the republic of men and for the Kingdom of God.

C. HOW MAY A COMMUNITY LEARN ITS UNMET SCHOOL NEEDS?

WILLIAM H. ALLEN, DIRECTOR OF BUREAU OF MUNICIPAL RESEARCH, AND NATIONAL TRAINING SCHOOL FOR PUBLIC SERVICE, NEW YORK, N.Y.

By six lines of attack must a community learn its unmet school needs:

By democratizing the purpose of the schools.

By demanding that the public be continuously informed regarding school work.

By making it easy for newspapers to report what the schools do and need.

By denying that the schools are better than the health department, police department, tax assessor, or the politics with which school children must learn to cope. Schools are weakened, not helped, by being separated from the main currents of community life and by being protected against problems which play upon and educate the child before going to school and after its few short years at school.

By encouraging school teachers, principals, superintendents, and commissioners to tell currently what they want, what they need, and what they dislike, and where they fail. This means adequate comparative statements, first by supervisory officers for schools within each community, and then by county and state superintendents, by the United States commissioner of education, and by national comparing agencies such as the Russell Sage Foundation. Having given up the fiction that there is something sacred about school curriculum, school policy, or school men, there will at once become available a vast amount of testimony, interest, and constructive suggestion on the part of those who best see the unmet school needs, namely, the men and women who are meeting the children and the problems of curriculum, management, and health. This will follow, not precede, the establishment of definite and continuous tests for the efficiency of school trustees and of the mayors who appoint them or the publics which elect them.

By making individuals so proud of their schools, and so interested in school problems that they will paraphrase Louis the Great and feel and say: "*L'Ecole c'est moi!*"

No community will be able to see clearly its educational needs not met which has not the habit of studying and challenging frankly the educational

needs which it thinks it is meeting and the methods of meeting those needs. The first requirement is, therefore, a system of school records and reports which will begin at the first day of the school year and record important facts regarding pupil, teacher, principal, superintendent, and system. But because no community lives by or for itself alone, every community will be helped in studying its own needs if it may see the experience of other communities. To help itself, therefore, every city should adopt the uniform records and reports which are being recommended by the special committee of the National Education Association.

From its own acute needs, however, and from its own disputes a community may learn more than from comparative tables for the whole country. To local reports we have a right to look for a special listing of doubtful or disputed points and for weak links in the administrative chain. No community which has not such special lists easily available can currently ascertain and study its unmet school needs.

The adequate current test of efficiency of teacher and curriculum becomes an adequate warning and serves the purpose of the "Glencoe bumps" at every street crossing which one Illinois town finds more effective than policeman or fine in preventing fast driving by automobiles.

Of urgent importance in all communities is a more definite standard than we have yet developed for the responsibilities of the school trustee. The time will come when we may safely say to those looking for unmet school needs: *Ask the school trustee.*

Because familiarity breeds astigmatism, myopia, despair, or at least procrastination in dealing with unmet needs, it is necessary now and then to bring in some outside light. One method of tearing away cobwebs is to send trustees, superintendents, principals, or teachers to the schools of other communities. This method has not been as productive as it ought to have been, largely because such visitors have not been expected to report their findings frankly to their colleagues and to their communities; in New York City, for instance, reports which cost thousands and thousands of dollars and which, if used, might have saved millions of dollars, lie in dust heaps unfiled, unindexed, unhonored, unused.

Another method of getting outside light is to bring in outside investigators. No community needs outside light more than a community which has been studying itself frankly and progressively, which has nothing to conceal, and which is eager to find where it can improve its school system. Such a community would do well to apply the following tests to its plan for a school inquiry:

1. Place the inquiry in the hands of a small local committee, each member of which has the "fact sense" and each member of which will be able to keep in constant touch with the inquiry. Obviously the program of this committee should be impersonal, non-partisan, and non-factional.

2. Give the committee enough time and enough money to insure a fair test of the

recommendations and constructive steps that should grow out of the publication of its facts.

3. This local committee should not delegate to outside investigators its responsibility for making the inquiry currently efficient. Pledges should never be made "to publish reports as submitted" unless reports stand efficiency tests—as to content and form. Pledges should, of course, be made, if needed, that the investigators' report will not be distorted.

4. No investigators should be hired who do not know how to break educational problems up into their elements. It is far more important to have investigators willing and able to learn what school men believe and disbelieve, and who know how to get facts in support of beliefs and disbeliefs, than it is to have "experienced educators."

5. The inquiry's plan and method should be explained by the committee to the public over and over again. Any part of the investigation which the public cannot be made to understand is not worth undertaking. It is doubtful if any benefits from investigation are worth while which the public does not understand.

6. To help inform and interest the public and to keep the public's questions constantly before official and paid investigators, some volunteer citizen committee should be organized and equipped to use this opportunity.

7. The inquiry should start with problems uppermost in the public mind and should proceed from most obvious and most pressing to less pressing and less obvious questions. Inquiries are often fruitless because inquirers insist upon looking for x and z before they seek a and b.

8. One hundred per-cent problems should take precedence over 1 per cent or 10 per cent problems.

9. Facts, not opinions, should be expected from the inquiry.

10. The inquiry should be conducted not only with dispatch but with obvious dispatch.

11. The inquiry should be obviously constructive from the first day, i.e., should be "vocational" not "academic." Each forward step taken by the schools brings new needs and new facts to light.

12. The inquiry should be democratic, i.e., not by the investigators for themselves or for the committee, but by everybody for everybody thru the investigators.

13. Reports on each subject should be threefold: (*a*) description, (*b*) criticism, (*c*) remedy or reason for maintaining present practice.

14. As rapidly as conclusive facts are obtained, and as rapidly as forward steps are possible, report should be made to the schools and to the public.

15. School officials should be publicly put on record as to facts, criticisms, and constructive suggestions as each subject or field is reported upon by the inquiry.

16. No more should be reported at one time than the public can understand, i.e., not only should interim reports and reports of progress be made rather than one final report, but these interim reports should be given to the public in "doses" which the newspapers will take and the public understand.

17. No conclusions should be stated and no constructive suggestions made which do not proceed from facts.

18. Conclusions should be so stated that constructive steps will be taken.

19. Lists of questions raised by the inquiry, for answering which facts are lacking and further inquiry needed, should accompany each report of facts obtained.

20. The necessary follow-up work by schools and community for utilizing the results of the inquiry should be outlined as the inquiry progresses and summarized as the inquiry ends, as, for example, how current and periodical records and reports need to be modified so as to reflect the extent to which follow-up action is taken by the schools.

21. Money values and money tests should be emphasized and not evaded because both the money cost and the money value of schools are certain to be given ever-increasing

weight in all American communities. It is affectation to decry the same efficiency tests for public education which are now demanded for other branches of public business and for all branches of private business. Any school expenditure which is too esoteric to be discussed in terms of what it costs and what it is worth does not deserve a place in the public-school curriculum.

The era of school inquiries has hardly begun. Within a generation, if not within ten years, every state in the Union and every considerable town will be asking itself the question: "What are our educational needs?" The Training School for Public Service, conducted by the New York Bureau of Municipal Research, has already begun the preparation of men for answering these questions for communities, beginning with the field study of Wisconsin's school system for the state board of public affairs.

The National Education Association can do much to expedite and facilitate both the current and the special tests which go by the name of "school inquiry." The opportunity of a generation now confronts it in the application of the United States commissioner of education for a *big enough program, big enough staff, and big enough appropriation.* To secure funds for this wider program of comparative study is to take tremendous strides in helping every community in the country answer for itself the question: "What are our unmet school needs?"

D. QUANTITATIVE TESTS IN EDUCATION

GEORGE H. CHATFIELD, SECRETARY OF PERMANENT CENSUS BOARD, NEW YORK, N.Y.

The efficiency of our school systems is questioned. Not within memory has the attention of school men focused so persistently in this direction. Investigations of the schools of great cities follow in rapid succession. Methods of organization, of administration, of teaching are subjected to searching analysis. Findings, critical and constructive, dissenting and approving, are presented. Yet the tide of discussion is swelled, not lessened.

Commerce, industry, politics, philanthropy, and other great fields of endeavor are similarly agitated. Before the impact of the oncoming generation, idols, long worshiped, long cherished, are falling. The old order yields slowly; it clings tenaciously to known realities; it rejects the claims of the new propaganda; it denies their universality. And so the tide of conflict moves back and forth in the great fields of human endeavor, disclosing in the lull of struggle the inevitable processes of change.

Elimination of waste is the fundamental doctrine of the innovators—of waste in material, in effort, in energy, in lives, in property, in justice. Nowhere may the advanced stages of the struggle be seen more concretely than in industry, for no field has a more constant and compelling motive—profit. Here are exhibited new processes, new labor-saving devices, new methods of planning, more detailed instructions, more exacting records.

Astonishing statistics show results doubled, tripled even many times. A decreased cost for the producer is claimed—an increased product for the worker. Not that these results remain unchallenged. Where incontestable, they are ascribed to unique and specially favoring circumstances. Aside from these instances, old methods are asserted to be displacing the new wherever the latter have long been tried.

Apart from the matters in dispute, there is in all well-conducted businesses strict accountability for raw material, labor, machine energy, overhead expense, completed product, and residue. Inspection, supervision, records, at all stages of the process; inventories, balance sheets, detailed periodic reports, mark the intimate connection between facts and income. The absolute dependence of effective administration upon complete and well-ordered information is clearly recognized.

For example, in the Middle West a great corporation manufactures stoves on a large scale. The shop history of each stove is kept in detail from raw material to shipment of finished product. The name of each workman responsibly concerned in the inspection of raw material, in the making of any part, in examination and shipment of the completed stove, is recorded. A complaint from a purchaser immediately locates the responsibility upon the workman at fault. The article upon which this care is lavished retails at $15 and upwards. The annual per-capita cost for elementary-school instruction in New York City, by comparison, is approximately $35.

A Pennsylvania steel company is largely engaged in the manufacture of steel tanks and similar articles. A necessary part of the process of construction is the detailed estimate of the sales agent, the orders and receipts for material in the shop, including such details as the number of rivets, the time spent by each workman and machine, a distribution of the overhead expense, and all these records in summarized form enable the sales agent in a distant city to make future profit a certainty, not an accident.

The conductor of a freight train is seemingly far removed from clerical pursuits, yet no care which he exercises over his trailing caravan is of more importance. He and every yardmaster concerned painstakingly report the number, point of origin, and destination of every car under their respective charge. The zealousness of operating employees is not the sole reliance in bringing a shipment to its destination. The central office expects to locate a car for any given date and to approximate closely the date for completion of the journey. Thus it meets the regular and emergency demands of traffic. How fortunate in comparison that school system which can approximate the date a pupil first came within its jurisdiction, and trace his progress from class to class, to say nothing of the date of arrival at his hoped-for destination.

Finally consider the New York Central Railroad and the public-school system of the city of New York—the former run at an operating cost of

$74,000,000; the latter, on the educational side, at an expense of nearly $26,000,000. For recording and compiling information, the former expends proportionately four times as much as the latter, and the same proportion holds when the material and educational phases of the school system are contrasted. As a matter of fact, when the efficiency of school systems is in question, the material of discussion is largely opinion. A technique of investigation and measurement is slowly arising, but its development is retarded by the absence of a generally accepted and recorded basis of fact. There are many figures, but for the most part they are unanalyzed and unrelated, and carry, even to the sophisticated, notions as exact and luminous as the volume of the wheat crop or the fluctuation in steel tonnage.

No doubt at this point there will be impatient protest that for that living complexity, the child, such comparison is meaningless. But is it too much to say that at least the administrator should be expected to know whether all these living units actually come within the scope of his influence, and to what extent? How else may he justify himself on the purely quantitative side when the business man complains of his product; when the social worker recalls the juvenile delinquent; when the criminologist points to the youth of the convict; when the child reaching maturity, unskilled and unwanted, points an accusing finger at the school he was so glad and so quick to leave?

These are not mere generalities. More than 9,000 children in the New York City public schools could not be located by the attendance officer last year; more than 6,000 were removed from the rolls for physical disability as the law requires; more than 12,000 were arraigned before the children's courts, and in 1910, more than 9,000 were convicted; 40,000 children received employment certificates; 60,000 children and more passed from official view and responsibility.

The state has virtually a monopoly in the field of elementary education. It excludes private enterprise because of its own immediate concern. The future citizen, the future producer and taxpayer, are so important to it that it undertakes the business of education for these ends. The statistics just quoted—and they are characteristic of the country at large—show that it is content to know the great majority have been reached, content to ignore those of whose existence and identity it is unaware. It further chooses to ignore the question whether its training has been efficient, whether it has produced the good citizen, the competent producer and rate-payer. It knows that the wheels of industry and trade and government continue to revolve, but it is unable to define or evaluate its part in the process.

Such is the common course of monopoly of all business from which the spur of competition has long been removed. While dividends are regularly declared, while needs do not outpace income, information is of little moment.

The passing of dividends, the need for greater income is the signal for its production. The public now questions the returns for the great sums it so lavishly expends on the schools—it is examining its waste products, the juvenile delinquent, the young criminal, the wayward girl, its matured youth, unskilled and ill adapted to employment. It is noting the success of the great Teutonic giant which long ago set its house in order.

How shall the state measure quantitatively its fundamental problem? How evaluate its efforts at solution? It must account for its raw material at every stage—its waste products, its marketable commodities. It must know the nature and extent of its ever-shifting market—the opportunities open to the labor and effort of youth and maturity so that training may be definitely correlated to such opportunities. This is the function of the continually recurrent census—in more concrete form to know who all the children are, where they are, and the conditions under which they live—what they have done in school and after leaving school, until it may be fairly inferred that the aims of the state have been realized. If the underlying theory is correct, a child can no more be lost to the appropriate training process in one part of the state than in another and, whether the community be large or small, such may be the result unless the responsibility for continuously recording each individual child be definitely located.

The work of the permanent census boards of the state of New York—there are three, one for each first-class city, New York, Buffalo, and Rochester—is founded upon this conception. These boards were created by act of the legislature in 1908, the new statute displacing one providing for a biennial census. The earlier law had met with indifference—the new statute faced vigorous opposition. General Bingham sought its repeal, the mayor failed to take any action. It was not until Commissioner Draper demanded a yea or nay answer and threatened to withhold the school moneys, that compliance was secured, but indifference still continues.

The Census Board is a separate corporate entity, consisting of the mayor, the police commissioner, the city superintendent of schools. It has a separate budget and is not subordinate to the board of education or any other city department. The law, in the following definite language, sets aside the administrative problem of the Board:

> . . . . said board shall always have on file a complete census of the names and residences of the children between such ages and of the persons in parental relation thereto. . . . . Such census shall include all persons between the ages of four and eighteen years, the day of the month and the year of the birth of each of such persons, their respective residences by street and number, the names of their parents or guardians, such information relating to illiteracy and to the enforcement of the child labor and the compulsory education law as the school authorities of the state and of such cities shall require and also such further information as such authorities shall require.

The information just described must be recorded for every child between four and eighteen years of age and provision made for keeping it practically

current in point of time. Change is the most marked characteristic. While some children are passing beyond the reach of the law, others are coming within its scope, and the facts are changed for many of those already enrolled. In any absolute sense, there is no solution with the means available. In a practical way, it is possible to meet the requirements. The law requires the initial enumeration and the amendment of the census to be made by the police and contemplated the use of the regular police machinery. The opportunities thus afforded for policemen on street duty to be off post caused a separate detail of policemen to be made.

A census blank was first devised to be made out for each child. Compactness and accessibility of information were prerequisites, for they meant economy of time, money, and effort. A periodic census may neglect these factors; for one continuously recurrent, it would have been disastrous. Doubling the area or weight of the record card meant doubled filing equipment and floor space, doubled effort in filing and locating records.

A smaller record, clear and related in form, concentrates the attention of clerks, lessens effort, lessens error—augments results. A 4×6 inch card was used. For filling out many items, "Yes" or "No" was checked. All returns were made in ink by the police; the records were filed without recopying.

The initial canvass was made as follows. The public and parochial schools filled out census records for each child on register. These records, arranged alphabetically by street number on the block basis, were assigned with the corresponding territory to the police officers for verification. Specific directions were issued for the interpretation and filling-out of each item. Every family was to be visited, every building and vacant lot to be accounted for. A daily summary of the work of each enumerator was required and compared with the returns. Periodic statements were prepared grouping the results impersonally, and furnished to the individual enumerator, accompanied by his own record. Careless work was returned for revision. Buildings and vacant lots reported were compared with detailed street atlases, and discrepancies explained by outdoor inspection. Fourteen enumerators, indifferent or careless, were remanded to regular police duty. The remainder did excellent work. The initial canvass occupied nearly two years—from January, 1910, to December, 1911. As the sixteen months allowed by the statute for preliminary organization had been frittered away, part of the first year was devoted to planning and experiment. Fifty-six men and a lieutenant were at work from May, 1910, to July, 1911; 200 men would have been required to do the work in a few months. Further delay was caused by the requirement of Commissioner Draper that the census be kept amended in every district where the initial canvass had been completed.

Violations of the compulsory-education and child-labor laws, as reported from day to day, were transcribed and forwarded for the action of

attendance officers. These numbered nearly 27,000. Children physically or mentally defective, and not already known to the authorities, were reported to the number of 3,600—of these, more than 1,100 were mentally defective. One thousand eight hundred neglected and destitute children received similar attention. Criticism has been made as to the validity of the violations of the compulsory-education and child-labor laws reported, but they were undoubtedly correct when discovered and referred. Much time elapsed before action was taken by attendance officers; in the meantime, the law had been complied with as directed by the police enumerators.

It has been said that a current census is impossible. The contrary has been demonstrated in the boroughs of Manhattan and the Bronx. Here the census was kept up to date for the better part of a year. A complete re-enumeration is not made. During the initial canvass, abstracts were prepared for each block, showing for each building, the name of each family and the number of children. (These are shortly to be superseded by new forms giving in addition the given name and date of birth of each child.) Individual census records for children at work or specially reported are also included. Of changes in register reported from the schools, some 600,000 are received annually—those involving discharge or change of residence are similarly classified by residence for the enumerators. To the foregoing, are added the names of immigrant children arriving in New York City for residence, by way of Ellis Island. Armed with these details, the enumerator verifies the facts already recorded and makes new entries only for changes. Visiting frequently the sections where moving is common, less frequently the sections where tenants are more permanent, a highly accurate amendment of the census is possible. Reporting of changes by house-owners and lessees has been advocated but is not yet approved by public sentiment.

The location by name from the files of so-called "lost" or individual children is not yet possible, an alphabetical file being necessary for this purpose. Its preparation is a year's work for ten clerks, including, as it will, more than a million and a quarter names. The appropriation for this work was refused this year.

An enumerator must cover a definite territory. From an alphabetical file, an assignment of work for such a definite territory is not feasible. Statistics also are generally wanted for small areas, usually by blocks. To meet these conditions, the original census records are filed by street numbers and blocks. Until lately, but few requests have been made for the location of lost children. The demand for statistics, the necessity for amendment work, have been constant and not to be ignored.

Machine tabulation has been largely employed, but is completely satisfactory only for congested areas. Small numbers are more readily cared for by hand. A punch card, $7\frac{3}{8}$ inches by $3\frac{1}{4}$ inches is divided into vertical fields or columns—each column permitting a possibility of twelve

printed numbers—0 to 12. Each column or field—two or more columns may be combined—corresponds in position to a field of census facts, the numbers in the column to variations in the facts, as shown by a code. The operator punches a card for a census record. The punch cards for a block are electrically sorted in number groups for each field and counted electrically. The punch cards are filed by blocks and amended, as their corresponding census records are amended. By amending the tabulating cards up to a given date, a correct tabulation as of that date can be had—the work of amending the census not being in the meantime disturbed.

The financial and educational authorities of the city of New York find no problem more difficult than the provision and location of adequate school accommodations. However vast the sums granted for this purpose, the increase and shifting of masses of the population have been greater. Census statistics now afford a reliable foundation of fact. The number of sittings, actual and available, for each school building is a matter of record. The number of school children, actual and potential, distributed by age and kind of school attended, is known for each block. Properly related on maps, it becomes a simple matter of arithmetic to fill up a school to its capacity, from the immediate neighborhood. As the process advances the areas lacking school accommodations are inevitably disclosed. With due allowance for natural and artificial barriers, the size and location of a building to serve the unprovided area may be readily determined. Automatically, the requests of the educational authorities are supported or opposed, the areas neglected or ignored are disclosed.

In 1911 the report of the Census Board to the financial authorities covered requests aggregating nearly $10,000,000, recommended an additional building in a congested section, and disapproved of seven others requested—a reduction of more than $2,000,000. As time passes, comparative figures by years for blocks and areas will show rates of growth or decline. This will be supplied for buildings as well as population. The general population figures for 1900, 1905, and 1910 have been similarly related.

Facts are also available for the study of the conditions affecting high-school attendance, and the consequent development of a system of high schools. These factors are type of school, age, and nationality of pupils, distance from school or transportation, length of residence, and occupation of parents. When connected with adult population figures, these statistics have a similar value for the location of evening schools, recreation centers, playgrounds, lecture centers, etc.

The consolidation of schools and classes will ultimately be based on census statistics, showing the number of children attending different schools by age, grade, and residence, thus accurately relating means to end. Similar information will be available and required for the annual school budgets.

Training for vocation and vocational guidance are topics concerning which much is said today—less is known. The schools are urged to take

up this work extensively. The information already gathered by the Census Board shows that opportunity for minors in the skilled trades does not exist in large amount. If the extension of vocational work in the schools is not to be more than wasted, exact knowledge is wanted concerning conditions and opportunities of work for young people today. Such information requires contact with the individual worker—the worker on the census lists—as well as with industry itself.

The city of Munich this year placed 2,150 out of 2,200 elementary-school graduates in specific callings. How did it do this? Not by guess-work. Each such calling had been carefully studied as to opportunities and requirements, each boy carefully studied to an extent that Americans are likely to call ridiculous, and a careful adjustment made. In New York the Census Board has statistics of workers from fourteen to eighteen years of age. The detailed study of specific occupations is part of its declared future policy.

Earlier in this paper, the existence of census boards was justified because of the immediate concern of the state for the future citizen and rate-payer. Enough has been said to indicate the way in which the problem has been approached. The census board under this, or other more significant name, will undoubtedly become a bureau for children's welfare, in the sense of providing information. At present a struggle has begun for enabling legislation in a definite direction. This may best be described by the following quotation from a report to Commissioner Draper in answer to a query as to the value of the census bureau as a basis for the proper and complete enforcement of the child-labor and compulsory-education laws:

> At present the two statutes are enforced through four different agencies; the census board, the board of education, the board of health, and the state department of labor—dealing respectively with the registration of children, the issuance of working certificates, the enforcement of school attendance, and illegal employment. Each phase, save that of registration, is a minor function of a great department of the state or city government—a method of distribution of powers and duties that can be defended only on the ground of exceptional efficiency, since inherently it makes for friction, obstruction, and delay. This office, as a mere reporting bureau, is unable to demonstrate the validity of its cases and, indeed, must present them to agencies supposed to cover the field from a different point of view.
>
> Sooner or later these functions must be centralized and because of the broad basis of fact upon which the census work is organized, the conclusion seems logical that the duties earlier described should be joined to its present duty of registration. The work in Philadelphia has but lately been reorganized on such lines, and has been most successfully carried on in this way in London for a number of years.

THE FUNCTION OF THE KINDERGARTEN IN THE PUBLIC-SCHOOL SYSTEM

LUCY WHEELOCK, WHEELOCK KINDERGARTEN TRAINING SCHOOL, BOSTON, MASS.

The story of life begins in a garden. It was a pleasant garden, so full of delight that today its name Eden means paradise. But it was not a place of idle delight. There was much to do in that garden. The world was young and the occupants of the garden were new to it. They must take possession of it and learn how to use it. Their education began in observing all the plants and trees of the garden, all the birds of the air, and the beasts of the field, and in naming them. And there was education by work, for the garden must be tended and cared for.

So life began in happy work, and obedience to the Lord of the garden. But an overweening desire for knowledge destroyed Eden, and its dwellers were driven forth to toil where no pleasure is, and to discover the misery of broken law.

This story of Eden is the continual parable of human life. The world begins again for each new life and all things are to be seen and named and used. A natural education begins in the activity of the senses, in the acquisition of language, and in learning the need of obedience to law. More than half a century ago a man, Friedrich Froebel, with the wisdom of the philosopher and the soul of a child, had a vision of what education could do for human beings with such favorable natural beginnings. He gave form to his vision in a scheme of education to which in a moment of happy inspiration he gave the name "Child Garden," thus indicating its scope and purpose. It exalts development and training above knowledge. Its function in a school system is to make the right beginnings of the educational process. It is a part of a whole, necessary to the excellence and completeness of the whole. As a system it has its own distinctive characteristics, and special instrumentalities and methods, which must be preserved in order to demonstrate the principles on which it is founded, and to realize its aim.

All kindergartners would agree on three fundamental Froebellian principles. These are the importance of each stage of growth, the development of self-activity, and the belief that we are all members one of another. To exemplify these in practice thru carefully selected means and the organization of the play activities is the special function of the kindergarten.

A consideration of the first principle shows at once that the kindergarten is not static, but dynamic—that educational means and methods must conform to the stage of development reached and must be progressive. It demands that the selection of educational means must keep pace with the growing needs of children, that they be suited to varying local conditions, modified by temperament, racial traits, and the degree of culture of any given group.

A recognition of the importance of each stage of development constitutes also the strong claim of the kindergarten as part of public education. We will let Froebel himself speak:

> Vigorous and complete unfolding and improvement of each succeeding stage of life depends on the vigorous, complete, and original development of each preceding stage. The boy is not a boy, or the youth a youth, simply because he has attained the age of boy and youth, but by virtue of having lived thru, first, childhood, then boyhood, faithful to the claims of his soul and mind and body.

Neglect of any stage of a growing thing means defect. Neglect of an early stage means serious loss, because wrong tendencies and habits are established.

To the school society relegates the task of equipping its future members with capacity for service and ability and desire to work for the good of the whole. The state insists upon a certain period of school training, that it may preserve its own integrity. This period is abbreviated more and more by the pressure of industrialism. If it be true that in America nearly 50 per cent of school children leave school before the sixth grade, and that the average period of school attendance is only five years, then every year conserved for education at the beginning is of the utmost economic value. It would also seem economically desirable to give the best tuition and guidance at the beginning, when the kind of world each child is to see and to make is largely determined. From the relative cost of education in different sections one would judge that this fact has not been fully recognized. In the 1910 report of the superintendent of public instruction in California, made with no reference to an argument for the kindergarten, the following figures are given:

Cost per year for each pupil enrolled in public kindergartens	$ 22.80
Cost per year for each pupil enrolled in elementary schools	31.98
Cost per year for each pupil enrolled in high schools	74.85
Does not include buildings.	
Cost per year per prisoner in penitentiary	255.85
This cost in addition to earnings of prison.	

The recent report of the Boston School Committee gives the following figures:

Cost per pupil in elementary schools	$31.98
Cost per pupil in Latin and high schools	76.63
Cost per pupil in Boys' Latin Schools	94.31
Cost per pupil in Girls' Latin Schools	69.69

The cost for elementary schools includes salaries of the supervisors of kindergartens and of domestic science and salaries of twenty-two truant officers, aggregating over $30,000 yearly.

In favored Brookline, with small classes, the city expends $55.20 for each kindergarten pupil, and $91.02 for a high-school pupil.

From the West, Miss Vandewalker reports that in Milwaukee the cost per pupil in the grades is $29, in the high schools $58. In Chicago it is

$33 in the grades, $57 in the high schools, and $89 in the Technical High School. In Detroit the cost in the lower grades is $31, in the grammar grades $41, and in the high school, $67. These figures were taken a year or two ago, but the proportion probably remains about the same.

Has this economy in equipment and teaching force in the lower grades anything to do with the necessity of employing truant officers at considerable outlay of school funds? Would the boy crawl like a snail unwillingly to school or go under escort of a truant officer, if he found there a place which satisfied all his desires to know, and all his wish to express, and his will to do? The teacher who can thus minister to the needs of childhood is beyond all price; but she also demands a price.

A recent article in the *Journal of Education* shows the value of the kindergarten to the school system in minimizing the number of retarded children. About one-half of all retarded children are retarded in the first two years of school life.

> The retarded pupils cost the taxpayers upward of $25,000,000 a year. They cause four-fifths of the nervous strain of the teachers. They rob the rest of the pupils of much of the teachers' attention that belongs to them. To save the $25,000,000 waste, the teachers' nervous strain, the time and effort that belongs to all the children, would be a vast achievement. The kindergarten can do all of this and more if the primary grades will accept their share of responsibility for the adjustment. If the primary school accepts its responsibility, a kindergarten promoted class may keep itself very near a unit for the entire eight grades. The kindergarten may save the taxpayers many times the cost, may postpone the teachers' retirement several years, and impart to the work with the other children an inexpressible impulse.

In Boston the raising of the school age to five or five and a half years means a longer period in the kindergarten and has already shown a reduction in the number of retarded pupils.

So far the school system provides better for the small number who finish their education in the upper grades than for the many in the kindergarten and the lower grades, who never get to the top.

> There are about 5,000 kindergartens in the United States which enroll approximately 250,000 children. But this is an insignificant number, less than the number enrolled in little Belgium or in Austria-Hungary, and less than half the number enrolled in the infant schools of either England or France, altho the population of both of these countries combined does not equal that of the United States. [Nina Vandewalker, in *The Kindergarten the Basis for Public Education.*]

The development of the fundamental before the accessory muscles gives a natural term to large, free-play movements, before the hand is ready to grasp the pen as a tool of language. The gradual awakening of the powers of careful observation and discrimination, dependent on developing brain centers, points to the wisdom of preparing for the recognition of the signs of language by preliminary exercises in form, color, size, and measurement. An alphabet of things should precede the alphabet of the primer. The progress thru the school grades and the development of later capacity will

be the final test of the "wonder-working" Montessori system, which initiates children into the arts of writing and reading at the age of four.

Aristotle, Quintilian, and other wise men of the past argued that the best teacher should be given to the youngest children, on the ground that the formation of right tendencies, aptitudes, and character was of the highest importance to the state. For the moderns, Professor John Dewey has said:

> The American people believe in education above all else, and when the educators have come to some agreement as to what education is, the community will not be slow in placing at their disposal the equipment and resources necessary to make their ideal a reality.

When kindergartners, superintendents, and other educators decide that the kindergarten furnishes the best basis for the public-school system, and agree as to the type of kindergarten desired, it will be established as firmly as the primary school and not subject to the vicissitudes of opinion of short-sighted taxpayers.

The advocates of the theory that the young child is a "little animal," and should be left free to carry out his animal impulses in some convenient back yard, forget the scarcity of back yards in a congested city district. They also ignore the world-wide proof of the claim that those who guide the first seven years of a child's life may make of him what they will. They fail to see that a civilization which desires to "let the ape and tiger die" must view the child as father to the man. The state may later have to pay $255 a year to protect itself from the neglected child, who may be initiated in his formative period into the standards and ideals of the social group at a tenth of that cost. As a thinking animal a child's mind demands some attention, as well as his body.

If it be conceded that the beginnings of education are important, what is the best beginning? Has the kindergarten demonstrated its reason for being? Has it made good? Judgment of any system based on random observation of individuals is unreliable, whether made by a university professor or in the columns of a popular journal. No careful and extended examination has yet been made of a group of kindergarten children kept as a unit thru the grades, and compared with other groups not starting in the kindergarten. Until such findings have been made public there are no data for accurately determining the more rapid transit of kindergarten children thru the grades.

> With prejudice it is useless to reason, as it did not come into the world through reason.

We must judge the kindergarten as we do any other part of the school system, by examining its aims and methods to see if they are true to the general purpose of school-training. We must then insist that its practice conform to its declared educational aims. No one can claim that the kindergarten has fully realized its aims any more than the high school has

reached its ideal of scholarship, or our democratic country the ideal of democracy.

"A man's reach exceeds his grasp," and the kindergarten has still its heaven to reach. Its aim is growth, not *knowledge* or *intellectual advancement*—growth in wisdom and in stature and in favor with God and man. Its method is determined by the two great principles already stated: self-activity and interrelationship. As to the first, there seems to be rather universal testimony from primary teachers as to its effectiveness. The objection to kindergarten children most often heard from first-grade teachers is that they are "too lively." In a process designed to promote efficiency, initiative, and power, that is not a serious objection. The opposite of lively is deadly, and no grade would accept that term as descriptive of its procedure. Where the best co-ordination has been made between the kindergarten and the primary grades, the best results of kindergarten training are observable.

For the thirty years of its existence in this country, the kindergarten has held to special educational materials designed to aid and abet the child's self-activity. These materials are used to develop the powers of observation, comparison, investigation, experiment, and invention. They are organized into a series, that there may be progressive guidance and consecutive exercises. They offer means of sense training, but this is not their final purpose. Neither is motor training or manual training the chief end. Their goal is complete activity, leading to efficiency, which is the power to do, to produce.

Says Froebel:

> We must begin in infancy to discipline and train the hands and fingers. We must teach the child to use aright the different members of his body, so that when he becomes capable of productive activity the objects he produces may have real worth.

The "complete activity" demanded by Froebel, "in which are blended body and soul, mind and heart," calls for application, interested attention, and the artist's joy in making. It would dispense with truant officers. Lack of fiber and disinclination for real work discovered among the students in some universities are not to be traced to the oft-times sporadic and brief period of kindergarten training, but to social conditions. Master Reginald, in his luxurious home, surrounded by dumb waiters and speaking waiters, with buttons to press for the supply of all his whims, whose very toys are wound up to spare him the trouble of starting them, will no doubt carry marks of enervation with him thru all the school period, which the best kindergarten cannot eradicate in three or six months, or even a year.

This aim of productive activity distinguishes the kindergarten at once from the Italian system now so much before the public. In a recent article in the *New York Times* illustrating this system we read:

> Although the games are played and the lessons taught with mechanical toys and blocks, bits of wood, and pieces of cardboard, and silk and leather cords, the children do

not follow out any ideas of manual training in "making things." They do not make anything. They simply play with the apparatus the games that teach the day's lessons.

The theory of education thru play is common to the two systems, but the use of play-materials to provide a quick and easy approach to the arts of writing, reading, and arithmetic is not a part of the kindergarten scheme. Its materials are developing, not "didactic." It makes sense training and motor training a part of its educational plan, but not the whole. Nor does it limit its production to handwork. To build a city is well, to make a City Beautiful is better.

The song of the singer, the rhyme of the poet, the tower which is "frozen music," the vision of the artist, who sees an angel in the marble, the words of the preacher—these are the city's best wealth. The possession of these things makes any city a Rome to which all the world builds roads. Because we believe this, the kindergarten introduces those elements of culture which develop power of appreciation and love of the beautiful. It gives various means of expression, that the child may learn to speak a varied language and so come to choose his own. The walk to read the great story-book of Nature, the excursion to see how the world works, gardening to teach the lessons of growth and nurture—these are the means the kindergarten uses to open the eyes of children to the world in which they live.

The song, the rhyme, the dramatic play, and the story appeal to feeling and influence the imagination—that faculty which rules the world. The scientific pedagogy of Dr. Montessori places emphasis on practical life, and disclaims any appeal to the imagination. But it is most unpractical to ignore the faculty which has built cities and adorned them, bound continents together, and given to man the bread of life. It is necessary to acquire language and a good vocabulary, to secure good pronunciation and enunciation, but there is a speech uttered from the heart out of which are the issues of life. The child is a poet, and song and rhyme are a part of his natural utterance.

Finally we must consider the function of the kindergarten as a place for social training. It would be difficult in a public-school system to promote any theory of education which did not recognize the value of group and co-operative work. The ideal citizen is the neighbor. Who is my neighbor? is a question the school is to answer, if it meets the demands of the society which supports it. School is not preparation for society. It is society. Here as in the greater world the law of membership holds: "We are all members one of another." The preliminary to working together is playing together, and at all stages we must live together.

The breaker of the law, from the man who overspeeds his automobile to the man who defrauds investors and stockholders, from the drunkard to the professional thief, is a man who has no sense of responsibility to his fellow-men. He doesn't feel his membership in society. A child who has been to kindergarten has learned to play fair; to think of himself as only one among many; to acknowledge the rights of others; to work together

and not against. These things become part of him, are instilled into his blood, woven into his nerves. His prejudices and impulses are all toward good citizenship. [Quoted from Professor Holmes, *Does Kindergarten Pay?*]

Free play gives scope for the development of individuality. It originates. It discovers. It explores. It gives freedom and power.

Organized and guided play gives collective power. It enforces the virtues of the group—loyalty, a sense of law and order, obedience and self-subordination, and co-operation. It is a drama in which each must act well his part. Organization and direction of the play impulses, control, and obedience to the law of the whole are absolutely essential in any group of children where educational and social motives are considered. Our American republic is founded on the belief that "United we stand, divided we fall." Men are willing to bleed and die for this belief. To fail to demonstrate it in school training would be a fatal defect.

Because of its adherence to basic principles of education and life the kindergarten claims its place in a public-school system. By its industrial training it makes the beginnings for practical life, by its cultural training for a good life, and by its character training for a righteous life. In the past its task has been to leaven the school with its spirit, to demonstrate the educational value of play, resulting in the municipal playground, to show the importance of the story and dramatic game in education, and the significance of group work in relation to community life. Its task today is to improve itself by better practice of its own ideals, and to prove its claim to be the basis of the public-school education.

Its mission is to keep and tend a Child Garden wherein grow the seeds of the tree of life, whose fruits shall bless the school, whose leaves are for the healing of the nations.

TOPIC: PROBLEMS RELATING TO CHILD WELFARE

A. THE DUTY OF SUPERINTENDENTS IN THE ENFORCEMENT OF CHILD-LABOR LAWS

OWEN R. LOVEJOY, GENERAL SECRETARY, NATIONAL CHILD-LABOR COMMITTEE, NEW YORK, N.Y.

Our critics are urging that the National Child-Labor Committee add what they call "constructive" features to our campaign. Many say in effect:

> What good do you accomplish if you only shut the child out of the factory, mine, sweatshop, and street trade and leave him in idleness? Is not your work all negative? Do you not overlook the entire positive side of the problem? Is it not more important that the child should get a good education than merely that he should be taken out of the mill?

If this criticism were fair it would be a severe indictment of a philanthropic enterprise that has made powerful appeal to the public. There

can be no justification of a policy which effects a half-cure and leaves the victim to limp out of the hospital to fight a battle against misfortune. The record of better child-labor laws secured in thirty states last year and in many states in our preceding six years of work means little if it stops there. But we refuse to plead guilty to the indictment. The effort to take little children out of industry and to prevent older ones from excessive or dangerous exposure is not an isolated enterprise, but it is a specialized enterprise. We recognize the existence of other agencies better equipped, more highly endowed to safeguard the interests that may be left exposed by our work. This is an age of specialization and our specialty is the release of little children from unfavorable industrial conditions. If we attempted more we should doubtless fail in even this.

While we acknowledge intense interests in the educational problems of our day and always co-operate in efforts to secure better educational laws, and while we realize that certain defects in school methods and equipment seriously confuse the whole problem of child-labor reform, we must at the same time decline any responsibility beyond that of other intelligent citizens. That side of the problem belongs to education. If children are thrown into vicious idleness as the result of laws which end their servitude in workshops and mines, the responsibility is not ours—it lies at the door of the schoolhouse. The American public-school system is said to cost our people not less than $400,000,000 per year, while various child-labor committees expend, I suppose, less than $100,000 per year. But there are people influential enough to defeat our child-labor bills before state legislatures because we will not guarantee to put and keep every child in school whose labor is interrupted by the proposed law.

Our work is of mutual interest and our efforts must interrelate, and recognizing the service school superintendents can render in the enforcement of child-labor laws I venture a few specific suggestions.

1. *Public school not a misfit.*—I need not dwell on the importance of emphasizing the dignity of the American public school as it is. Not even the church is subjecting itself to so merciless a grilling. Its most emphatic critics are school men. And while we should like to go on record as indorsing all efforts to strip the school of outworn or meaningless incumbrances, there is something to be said for the school system on its present basis and we are in danger of driving children away by our frank confession that it is so bound by tradition and custom and a top-heavy curriculum that it is foreign to our present needs. Even as it is, let us make it clear to the public that the school is neither a misfit nor a failure. I mention this because of my second suggestion.

2. *Push compulsory attendance.*—The school superintendent can help enforce child-labor laws by pushing compulsory education laws into every section of the country. This is taken for granted in most parts of the country, but there are still sections in which, because of ignorance, pre-

judice, or tradition, the people are unwilling to accept this only foundation on which a public-school system can rest. It is not difficult to announce our belief in compulsory education at a convention like this, but what I am urging is that the man, whose duty calls him to the South and to places not south where people are hostile to compulsory education, shall have the courage of his conviction and insist that the children of those sections are entitled to the same educational benefits that accrue almost automatically to children of New York, Massachusetts, or Ohio. A powerful association like this can and should back to the limit one in such a position.

A glance at the census report of illiteracy in the various states outclasses all argument that can be advanced for compulsory school attendance, but from the standpoint of the working child the service of such laws is demonstrated by the fact that most children begin work within a few weeks of the birthday set by law as the minimum age. If the law releases the child from school and to work at fourteen he goes to work at fourteen, if at twelve he goes to work at twelve, while in the few states in which employment of children under sixteen is being made inconvenient they are tending to stay in school to sixteen.

3. *The public school is public.*—I further suggest that it is the school superintendent's duty to get all the children in school. For this he must have a correct school census which can be best checked up for accuracy by frequent reports from teachers. These can keep him in touch with the delinquent members of their classes, and with the family life of the community. They can get from young scholars valuable information about older brothers and sisters—their ages and occupations. Obviously a school census must also cover every parochial and private school, and no argument has to my knowledge ever been advanced against placing in the hands of public-school superintendents such a complete compendium of information about all the children in the community that he will be in possession of a full census.

The school superintendent is not clothed with discretionary power. When 10, 15, or 25 per cent of the children of a city are not in school, when their existence even is unknown, and when they are left to their own desires as to their future, someone has been false to a public trust. The public school is *public:* the taxpayer contributes to its support as a matter of business. We believe popular education contributes to a man's life; his family is more secure; his property enhanced; the market for his products stimulated according as the people of the country are intelligent. Therefore the citizen has a stake in the education of every child—not of almost every child, but of *every child*—and he has a right to demand that his contribution to the public fund in the form of taxes is equitably distributed.

I need not pause to discuss the practice of truant officers. The employment of one man to chase truants scattered over a hundred miles of streets,

or the employment of a truant officer whose only recommendation is that fifty years ago he bravely carried a musket, or one whose only service to his city has been as the tool of some political party: these and other examples have made the truant officer in many localities a sorry joke. But without discussing this and turning to more satisfactory examples, we are aware that the typical truant officer considers his duty done if he rounds up the children who have fallen out of school for a few days and gets a fair percentage of them back. The exceptionally good truant officer feels his duty done if he gets every enrolled child in school. But where is the truant officer who regards himself responsible to the state to see that no child in the community is missed; to look up the family that moved to town last week; to report to their destination those children who move away? The duty is not easy to perform and we are too prone to overlook the demand child labor makes, not only on those children who are under age, but on all those with insufficient schooling. Whatever criticisms have been made of the truant officer rest in their final analysis upon the superintendent. His regulation of this department of the work may be difficult and may involve him in embarrassing complications, but there can be no question that the matter is vital and should be made with him a determining issue, if necessary.

4. *The school a social agency.*—The school superintendent will help enforce child-labor laws by recognizing that the school is the servant of all the children all the time. The interest of many teachers appears to be confined to children actually in school, or if to all the children who ought to be in school, is frequently confined to those only during school hours. In other words, it is a professional interest. This is said not in criticism, but in explanation, and the superintendent is in the best possible position to combat this professionalism among the teachers. The man fulfills his professional duty when he sees that children are properly cared for between the hours of nine and four, but the problems of education are so intertwined with the family problems of food and clothing, of employment, of recreation and rest, of ventilation and sunlight, that we cannot separate them. Many of us see in the public school the promise of a social supervision of the home care of children which shall eventually mean for every child an opportunity to develop. The school superintendent and his staff can best of all public officials recognize the existence, problems, temptations, and possibilities of children of school age before nine o'clock in the morning and after four o'clock in the evening. Discussions of delinquent and backward children are superfluous unless accompanied by facts gathered by an investigation as in every science. These facts can best be secured by school workers studying the living problems of their own communities.

5. *Why children are let out of school.*—Superintendents can directly aid in the enforcement of child-labor laws by arousing in their principals and teachers a conviction that it is unprofessional to misrepresent the age

and ability of children in order to get them out of school. In many cities it is the official duty of the school principal to furnish the information on which children are released from school and inducted into industry. Even where laws are specific they are sometimes disregarded. Affidavits are issued by subordinate clerks entirely ignorant of the law. Sometimes with a dispatch which can only be explained on the ground that the principal believes that the child will be better off out of school than in, these helpless children with no guide at home or elsewhere are thrust by thousands out of the schoolhouse and into our child-employing industries. Whatever our legal standard may be, we should insist on its observance and should compel definite steps to guarantee that no improper child shall be released from school, and at the same time every facility shall be given to the proper child to make the transfer he desires. To perform this service the superintendent must see to it that every teacher on his staff knows the child-labor laws of the state in which the city is located. This can be done by means of teachers' meetings, by placing copies of the laws in the hands of each teacher, and by putting the school in direct touch with the Department of Factory Inspection, the board of health, the juvenile court, and child-labor committees.

The superintendent should resist the desire of teachers to rid their classes of backward, unruly, or disagreeable children. We recognize that there are children who fit all these descriptions and that one of the sore afflictions of the school teacher is the endurance of such. Nevertheless these are a part of our citizenship; these are the very children on whom special attention should be bestowed rather than allowing them to drift out of school to lose henceforth any inspiration or guidance this institution can afford. When the child begins to lose interest in school, partly because of his own changing mental and physical condition which ordinarily occurs at about the fifth or sixth grade; partly because his parents are nagging him to earn his own living; partly because of the example of other misdirected children, he becomes an offense to the ambitious teacher who is eager that the whole class shall make a fair showing and that her faithful seed-sowing shall bring forth abundant fruit. At this point the effort to arouse a public sentiment in favor of child-labor laws is imperative. The school superintendent is the best possible person to do this, and many are doing it by encouraging teachers to a personal acquaintance with pupils and their home environment; by developing parents' associations; and by attempting to secure an exchange of experiences between teachers and parents' associations thru such agencies as the Public Education Association, giving special attention to exceptional children. If there were no solution offered by educational institutions themselves, I should hesitate to appeal to this point for exceptional children, but special classes for children defective in sight, hearing, or mental equipment have been so well established in a number of states that the idea of special training is

no longer an experiment. The superintendent must be the schoolmaster of the board of education and the whole community regarding that percentage of his school children who slip thru the fingers of the authorities and become lost for lack of a substantial increase in school equipment in order to meet their special needs.

6. *Practical education.*—The superintendent can help enforce child-labor laws by giving the child who wants employment something to do. We must articulate the school with life instead of making it fit only the few who want to go to college. The demand today is widespread that we develop in our highly organized city-school systems a principle which was fully developed, altho in very crude form, in the old log schoolhouse familiar to some of us thirty years ago. It was possible there to combine industrial training—training which existed not for its own sake but for the sake of getting things done on the farm—with what little scholastic training the school had to offer. It was unclassified and bungling, but it taught hundreds of boys and girls the dignity, honor, and necessity of hard work and it made them appreciate during the school hours that they were not and could not be isolated from the actual problems of life. We shall hold the children in school; we shall win the support and loyalty of parents; and we shall eventually win the wholesome respect and right co-operation of those elements in the community that want to use these children, according as we emphasize the practical phases of education and link every course to living problems. It is for the educational effect on the children quite as much as for the purpose of securing obedience to child-labor laws that we urge this educational revolution. At the present time the three defenders of child labor are the employer, the parent, and the child. Progress against such a combination is slow and discouraging. A school curriculum fitted to the needs of our industrial civilization will rapidly win the allegiance of at least two of these allies, and with the parents eager to keep their children in school to the very last moment and with the children quite as eager to remain, the advocates of child-labor reform could afford to ignore the desires of that small percentage of employers who fatten on the product of the children's toil.

Much has been said recently in criticism of the eight-year course and the six-year law. It has been pointed out that the child who obeys the compulsory school law in many states leaves school before completing the primary course and it has been proposed to redivide our course of study taking two years from the elementary course and adding two years to the high school. It is, of course, unfortunate that the line of cleavage in school comes at the line of cleavage in the pupil. It is doubtful, however, whether the change suggested would accomplish the purpose desired, or whether on the other hand it might result only in the child breaking away, in many instances, two years earlier than now, having completed his primary-school course. Shall we not aid more in holding children in

school if we develop some plan of filling the last two years of the elementary-school course with practical applications of the instruction which has been mostly theory in the first six years? We might thus try to get the child started in his new line of educational development; might arouse his interest in the laboratory methods involved, and, having given him two years of this before he finishes the elementary grades, awaken in him an intensity of interest in the four years of opportunity to follow. We shall thus help to bridge the chasm into which so many children now fall.

7. *The teacher must know industry.*—It will be impossible, however, to develop wise industrial training in our public schools unless superintendents and teachers become familiar with local industries. The development of vocational guidance is one of the most interesting adventures of the new education: it is worthy the highest commendation and encouragement. But I believe I voice the opinion of the leaders of this movement in Boston, New York, Cincinnati, and other cities when I say that there is in this and in the attempt to develop industrial education a point of caution we must not overlook. Many assume that if the children of our schools can have this new education instead of the old; if we can train them in school to make things of wood and iron and brass and cloth and dough, instead of as in the old days teaching them only Latin, Greek, and calculus, we shall be able at once to turn out into American industry an army of skilled and highly intelligent operatives who will lift our industries from their present unsatisfactory plane and will give employers of labor good and faithful servants.

We have watched with intense interest the development of half-time schooling for high-school and college students, combining education thru books with technical training; but we need to recognize that when we treat of the elementary-school child, there is another factor. There are industrial opportunities offered for the sixteen- or eighteen-year-old boy in many of our communities. He should be encouraged to seize opportunities and advance upon them. The same is not true of the twelve- or fourteen-year-old child, and when it is assumed that if a thousand children of this age are properly trained in school they can at once find the thousand jobs awaiting them in their city, the fact is overlooked that an examination of those jobs will reveal that at least seven hundred of them are unfit for a child under any conditions. This is true anywhere outside of agriculture. Economic pressure because of family poverty, and the pressure of industries which want to employ children are, in my judgment, the two chief factors in drawing children away from school today. If the teacher knew the nature of the job that awaits the child on leaving school, he could often dissuade it from entering that industry. Complain of the poor training our children get in school if you will, but American industry needs training more than do American children. The job that awaits the child is farther from the ideal than is the child. If our efforts to train our

children industrially and to direct their minds toward vocation simply serve to make a larger number of them appear to fill the jobs that yawn for them at twelve or fourteen years of age, we shall have committed a sin against our civilization, and against the laws of human economics for which it will be hard to atone. But if I rightly understand the motives of those vocational guidance leaders who are fashioning new educational movements today, I agree with them that our chief interest in vocational guidance and industrial training is because of our belief that this work will help to revolutionize the school course. By bringing industrial considerations into our school course; by making children intelligent as to the history, significance, and opportunity of various occupations; by teaching the dignity of honest labor and the economic sin of making bad goods out of good material and the twin economic sin of paying wages that will not sustain life in reward for labor, we shall enrich and enlarge the school curriculum, making it so attractive that children will voluntarily remain in school one or two years longer than at present, and we shall save just that much of childhood to a richer, fuller maturity.

The sum of all this is that our work is one. While school authorities and child-labor committees may seem to be working in different fields and asking aid and favors of each other, our efforts interact in the same field. On the one hand, our efforts to secure child-labor laws and their enforcement, which sometimes appear arbitrary, are in fact only a part of the effort to lift from children the pressure which now crushes them out of school. And when we ask school superintendents to aid in enforcement of child-labor laws we are only seeking to offer them a tool with which to do their work more conveniently and to make the school serve more of the children.

B. HOW FAR SHALL THE PUBLIC-SCHOOL SYSTEM CARE FOR THE FEEBLE-MINDED?

JAMES H. VAN SICKLE, SUPERINTENDENT OF SCHOOLS, SPRINGFIELD, MASS.

The opinion is gaining ground that the care of the positively feeble-minded, like that of the insane, is a state function and not one for local communities. Few states have yet made adequate provision for the care of the feeble-minded, consequently for the present most cities and towns must do what they can independently till the state is ready to carry the full burden. The public is slow to realize the extent and gravity of the problem. One of the most competent authorities places the number of feeble-minded in any community at three to every one thousand of the general population. These are individuals who cannot sustain themselves in competitive industry. They remain children all their lives—children in intellect and will, tho adults in stature and in instincts.

Boys of this class, if left to themselves, are likely to drift into criminality.

Being too inefficient to secure steady employment, a life of criminality proves the path of least resistance for them and they soon come upon the state for support in our penal institutions. We know that large numbers of the inmates of our jails and prisons are mentally defective. At the expiration of their terms they are again thrown out upon the community no better able than before to sustain themselves honestly, and with even less will to do so. Out of prison as well as in prison they are a public charge.

The feeble-minded girl, if unprotected, is a still greater menace to the community. While there are feeble-minded children born into good families, such cases are sporadic. They amount to less than 20 per cent of the whole number. Eighty per cent of the feeble-minded are so by inheritance. To prevent the marriage of feeble-minded girls, and to shield them from temptations to which they are notoriously easy prey, is obviously the duty of society as a plain matter of self-defense.

What can the schools do? The public school is one of our social institutions and as such it may justly be expected in work with the feeble-minded to do whatever its publicly provided facilities permit it to do without neglecting its other functions. Some of the things it can do in this direction are as necessary for the protection of the normal children as they are advantageous to the feeeble-minded themselves. Each type needs instructions different from the other. The school can gather the feeble-minded into groups for special treatment and care, and it must do so much in the interest of normal children whose progress the subnormal impede if retained in regular classes. Furthermore, since the obscene and indecent acts which teachers sometimes have to correct are almost invariably committed by mentally defective children; on this account also the school organization should see to it that normal boys and girls are protected as far as may be from association with those whose sense of decency is lacking.

While feeble-minded boys are within the usual compulsory-attendance age, they are not a menace to school or society if taught in separate classes. It is when they are fourteen or sixteen years of age or over that they become a menace. The feeble-minded girl may become a menace several years earlier. The public school cannot, therefore, with safety retain feeble-minded children very long without a radical addition to present means for their care in the form of residential homes or colonies with farm, garden, shop, and productive industry such as are now provided only by the state. There must be separate homes for boys and girls to which they would be legally committed for life. This would not, of course, be necessary where the feeble-minded boy or girl has a good home and reliable parental protection. It would, however, be necessary in a very large majority of the cases.

It has been suggested, if parents are unwilling to have their children transferred to such a colony after they have exhausted the resources of the special public-school classes and have left school, that the feeble-minded

may be guarded by teachers or probation officers who keep watch of them at their homes, and, upon any indication that they are going wrong or becoming in any way a menace to society, take immediate steps to have the state interfere and take such children to the colony home. Should society adopt this plan of self-protection, the school might properly be called upon to aid, since the teachers of the special classes are the only ones who know intimately the characteristics of the children in question. At any rate, it is manifestly important to have all subnormal children, except idiots, attend school during their earlier years, if only for the purpose of being studied. Some thus studied prove to be only backward or slow in developing and may safely be returned to the regular classes after time and special help have co-operated toward improvement. Specialists expert in this work find it impossible to determine, except after long observation extending in many instances over several years, whether a child is feeble-minded or merely backward, hence the special class in the public school serves its most useful purpose as a clinic in which suspected cases are slowly and carefully diagnosed. The mental condition of a child should, however, be determined as early as possible, certainly within the first two years of his attendance at school, lest habits of inattention too bad to be corrected be formed, and lest he become chronic in never accomplishing anything. These children are in special need of the inspiration of success. This they get in the special class where the tasks set are within the grasp of their feeble powers.

The teacher of the special class should be equipped, not only with technical knowledge of mental defects, but with ability and willingness to enter into sympathetic and friendly relations with parents of feeble-minded children, gradually and gently acquainting them with the child's real condition and with the advantages which the state colony offers, and finally securing their consent to a transfer to the institutions. The most delicate and individual work is required here, and the teacher who undertakes this service must be an exceptional person. One such in any single city, except perhaps in a dozen of the largest, would probably be sufficient, since other teachers with less scientific preparation could serve in auxiliary centers under the guidance of the single expert. Teachers of regular classes should call the attention of the specialist to suspected cases. These the specialist should observe in their rooms and advise for or against a transfer to the special class.

The school physicians and other physicians of the community, and social agencies of various sorts, should be drawn into co-operation so that each child may be put into as good physical condition as possible—his teeth mended, his defective eyesight aided by glasses if necessary, his body nourished by food and protected by clothing, either at public expense or by philanthropic endeavor. Hygiene, exercise, and manual industry should be the prominent features of the schooling of these children. The ordinary

curriculum should be in evidence only incidentally. The public school will render its greatest service in fitting these positively feeble-minded children, as far as may be, for self-support under close supervision in some of the simplest industries that can be carried on in colony homes, and in sifting the human material that it handles so that the various elements will reach their proper goal, this goal being life in society for the curable cases, life under protected conditions for the incurable.

Another service which the public school can perform is that of acquainting the public with the gravity of the situation and the need of greatly increased facilities for dealing with the growing menace of the feeble-minded. To this end it is important that permanent records be kept which will afford cumulative evidence of a convincing character. Such records have been kept in Springfield. During the past six years thirteen pupils have gone from the class to the state institution at Waverly, sixteen have regained their places in the school grades, three have entered parochial schools, eleven have moved away, and eighteen are regularly employed. Twenty-nine have had physical defects remedied.

In the words of Dr. Fernald, of Waverly, Mass., from whom I quote:

> The one great deduction from the sixty years' experience in the education of the feeble-minded is that under the best conditions only a very small proportion even of the higher-grade cases become desirable members of the community. They need protection and care and the family and community should be protected from their certain tendency o drift into pauperism, prostitution, and crime.
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> It should be remembered that under the most favorable conditions hitherto, a very large proportion of feeble-minded persons, even of the higher grades, eventually become public charges in one way or another. No one familiar with the physical and mental limitations of this class can believe that any plan of education will ever materially modify this fact. Any relief as to public support to be obtained from public-school training can be only temporary. Feeble-minded children may be tolerated in the community, but it is a great responsibility to inaugurate any plan on a large scale which does not withdraw from the community the defective adults. The feeble-minded are powerless to resist the physical temptations of adult life and should be protected from their own weakness.

C. *THE CITY TRADE SCHOOL—AN IMPORTANT INSTRUMENTALITY FOR IMPROVING THE VOCATIONAL NEED OF THE CITY CHILD*

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

As young people grow up they betake themselves to various avocations. Some enter commercial pursuits; they become bookkeepers or cashiers or stenographers or salesmen, or in some such manner have to do with buying and selling or the records thereof. Some enter the professions and become doctors or lawyers or engineers or preachers. Some become farmers or stock raisers, and coax the soil to give up its wealth. Some are laborers who do the unskilled work of the world for the unskilled workman's wage.

Some find their way thru the more or less difficult channels which lead into the skilled trades and become craftsmen, or craftswomen.

The state has long recognized its duty to provide vocational training of certain sorts. Engineers and doctors and lawyers, as well as farmers and dairymen, have long been taught for their work at state expense; of late years the need of commercial training has been fully recognized and vocational training of this kind is now given in a multitude of high schools.

But not all young persons wish to enter the professions, or to work in commercial lines. A considerable number wish to learn trades and become craftsmen. A considerable number, also, of the contingent who now drift into some form of unskilled labor, have the ability to become skilled mechanics if a suitable opportunity were given and their attention turned to the matter. There is a demand for some adequate means whereby these young people can learn trades.

But this is true not merely from the side of the young people; the manufacturing and building employers want more good mechanics than they can get. The supply and quality of skilled craftsmen is not being kept up. And this need felt by employers is supplementary to the need of the young people who must have the proper training to fit them to fill the responsible places into which the employers of skilled labor would be glad to put them. It is reasonably clear that some means, either old or new, is required to supply this demand for industrio-vocational training.

The old methods of training skilled mechanics have broken down; they are not, today, producing either the number or the quality needed. This situation is probably the result of two causes: first, not enough youths enter upon and complete apprenticeships; second, those who do serve apprenticeships do not get the same kind or quality of training which apprentices received a generation or two ago.

The shoe is no longer made by a single shoemaker, who cuts and lasts and soles and binds and finishes; it is made in a factory where the completed shoe has passed successively thru the hands of a score or two score of pieceworkers, each contributing a single part or performing a single process. Commercial considerations usually keep each worker at the single process or machine at which continued practice gives to him most speed, and to the establishment most profits. Few, very few, have a chance to "work thru" all the processes of the trade and become familiar with all the machines; the great, the very great majority become pieceworkers or partmakers. They do not know, and if called upon, could not do, more than the one or the few processes thay have learned. In other trades, machinist and toolmaker, carpenter and joiner, blacksmith, weaver, the same change has come. Under these conditions the manufacturer develops the "machine-tender" instead of the mechanic. And, because they are able to get along with a smaller proportion of men skilled in all departments of the trade, employers sometimes take no apprentices, and thus dry up their supply of skilled labor.

In the shop the apprentice of today seldom learns his trade under the eye of the master, the owner of the shop, as he did in the past, until within a generation. Instead of a sympathetic and kindly master, who had a personal interest in the lad and charged himself with his instruction and development, he works as one of a roomful of men; the foreman feels responsible, not for the development of the apprentice, but for the profit to be made out of the apprentice's performance; it is likely to be, in his eyes, far more important for the lad to get skill in a few processes by which he can learn quickly to turn out profitable piecework, than to take all the exercises and learn most thoroly all the departments of his handicraft. The boy learns what he happens to, what he can pick up, and what is necessary to enable him to become, most quickly, a profit-producing member of the working crew. Under these conditions, with the probability that he will be able to learn only the fragment of a trade, is it strange that the boy is discouraged by the prospect, and goes into another line of work, or drifts about trying various forms of unskilled labor? And sometimes the regulations of trades unions prevent boys from entering upon apprenticeship. The rules of the union perhaps provide that only a certain number of apprentices shall be allowed, in proportion to the number of journeymen; the quota is full, and the boy must seek something else.

To meet these conditions which have arisen in our day, the trade school has been established and seems certain to become more of a factor each year, in the education of both boys and girls for at least the commoner skilled handicrafts.

Trade schools may be classified as of two general types: First, that type usually thought of when the term "trade school" is used in this country; a school equipped with all the requirements for work at the trade and manned by skilled teachers, themselves masters of the trade taught; a school to which a youth of proper age may come and learn all the things an apprentice should learn in order that he may take his place in the trade as a "graduate apprentice," or "beginning journeyman." Second, that type of school probably most commonly found abroad, a type often in the minds of persons who have traveled abroad when they speak of "trade schools"; a school to which apprentices learning the trade by that system, and even journeymen already practicing the trade, may come in the evening or during some hours of the day, and receive instruction in departments of the trade which they cannot get so quickly or so well in the shops, and also in mechanical drawing and in the knowledge of scholastic subjects which will make them better mechanics.

This latter type of trade schools, now successfully operating in a number of cities, is likely to be most easily established and less costly, and can be made to serve in the near future the youth of many cities which are not yet prepared for, or cannot at present afford, trade schools of the other type. The benefits of schools of this sort may be promptly realized upon

in the form of a supply of young mechanics of improved general quality in the community.

For the boy who desires to learn his trade at the school, as well as for that one who for one reason or another is excluded from an apprenticeship, the trade school of what has sometimes been called the American type supplies a very real need.

Along with many and marked advantages, such a school has some disadvantages in the teaching of certain trades. In some building trades especially, it will probably be necessary for the apprentice to have at least a limited experience on outside work, "on the job," before he is as self-reliant and resourceful as the lad who served his apprenticeship in the old way, before he is as able to put things together and fit into the general scheme, under the varying conditions in different buildings, the parts of the job for which his trade is responsible. But the boy from the school has the best instructors to teach him in all the branches of his trade and not only to teach him all parts, but the best way to do each particular thing; the boy trained outside does not by any means always have this. And the boy from the efficient trade school will more quickly get the necessary practice and expertness in making ends meet—adapting means to ends—than the "outside" boy will get the knowledge of reading and making drawings, of the mathematics that relate to the trade, and the general knowledge regarding it, which are rarely given to an apprentice in a commercial shop.

The trade school of this type does not give to any graduate the speed in certain trade processes which the "outside" beginning journeyman is likely to have. This, however, is a minor matter. Such speed is the fruit of repetition and practice; it is acquired in a few months—often in a few weeks. As soon as this is accomplished the trade-school boy is more valuable to his employer on account of his more complete and better-rounded training, and his superior general knowledge of the trade and its processes, and the principles which underlie it. The foreman of an important department in a great industrial plant recently said that, while trade-school boys sometimes lack speed on first leaving the school, the handicap soon disappears, and thereafter the balance lies in favor of the trade-school graduate. A large employer of labor has stated that, of two boys entering at the same time upon the learning of a trade, one devoting four years to a regular apprenticeship, the other, the two years usually required for a trade-school apprenticeship, and then going to work at the trade, by the time the shop lad has finished his apprenticeship at the end of four years the trade-school graduate is so universally superior that there is no comparison.

It was the fashion, when schools like the Williamson School of Mechanical Trades, the David Rankin, Jr., Trade School, and the Milwaukee School of Trades for Boys first came into notice, for skeptics to proclaim that such

schools could never teach real mechanics; the plant might look very nice, but skilled craftsmen could be made only by the old system. The experience of a few years and the showing made by the graduates of those schools have already dissipated these gloomy prognostications. The graduates get places. Sometimes the prejudice of foremen or employers makes it less easy than it ought to be, but all who want places get them. And after they get the places the trade-school graduates hold their own. The best proof of such a product is its satisfactory use under regular commercial conditions; and the employers of these young people have no question as to their value or to the success of the trade-school training. Only those who do not know continue to maintain that trades cannot be successfully taught in properly equipped and officered trade schools. In a few years this claim will be heard as infrequently as the claim that schools of medicine cannot properly educate doctors, or law schools fit lawyers for successful practice at the bar.

A good illustration of the money value of the training given in a good trade school is the showing made by fifty of the fifty-one members of a class (the fifty-first did not report) which graduated in March, 1910, from the Williamson School of Trades. Six months after graduation fifty members of this class, 12 bricklayers, 13 carpenters, 4 steam and electrical engineers, 11 machinists, and 10 pattern-makers, were earning an average wage of $16.60 per week. Incidentally it may be noted that all but one of the fifty reporting liked the trade, and all but two were working at it. Of these two, one, a carpenter, owing to temporary dullness in his trade, was inspecting material in an automobile factory, intending to return to work at his trade as soon as possible; the other, a pattern-maker, was working as draftsman. One year later, eighteen months after their graduation, the fifty were receiving wages averaging $18.05 per week. Another incident may also be of interest. Up to last April the Milwaukee School of Trades for Boys had graduated 12 pattern-makers, 12 machinists, and 10 plumbers. Of these thirty-four boys, 2 were working as draftsmen, 1 was working in a foundry during the dull season for plumbing, 1 was taking postgraduate work at the School of Trades, 1 was a student at the university, 1 in business with his father, 1 was just graduating; the other 26 were working at their trades. Of these the average wage of the ten pattern-makers, counting the same number of hours as in case of the graduates of the Williamson School, was $17.41 per week; the wages of the nine machinists was $17.89 per week; the wages of the seven plumbers, $29.43 per week. These twenty-six young men were earning an average weekly wage of $20.81. The average time these young men had been working at the trade since graduation was eighteen months. Only casual consideration of the matter is required to make clear to anyone how the wages of the graduates from these two trade schools compare with the pay of the average young man under twenty years of age who has entered

some unskilled employment to work with his hands. The Milwaukee School of Trades for Girls has been in operation a trifle more than two years and only seven graduates have been sent out; but some facts are already established. The girls from the school who have completed only a part of the course in millinery are in demand in the shops and wholesale houses at wages from 50 to 100 per cent higher than girls of similar age who are at work in various unskilled employments; girls who have only passed two or three of the six parts of the course in dressmaking are now able to go out and earn, either in dressmaking shops, or as dressmakers in private homes, wages that compare well with those of girls from the millinery department.

It is objected to trade schools that they are expensive, that is, more expensive than most other schools supported by the public. It is even alleged that it costs $200 or $300 a year to educate a boy in such a school.

Probably trade schools are more expensive now than they will be by and by, when plants are built and equipment installed, the most effective and economical plans of administration and instruction ascertained, a sufficient supply of well-prepared teachers at hand, young people and their parents educated to the value of the education which the schools offer, and the school plants filled so as to utilize them up to their capacity. But it may be that even a cost of $200 or $300 a year, for some two years, is not an exorbitant price to pay for the making of a first-class mechanic.

Someone has said that "to pay out $2,500 to make a $1,000 boy" is educational waste. Is it, if by "a $1,000 boy" is meant a boy who can earn at his trade $1,000 a year? I have recently been looking up some manual-training instructors. Several intelligent mechanics have applied for these positions. I have found that all of those who measure up at all to the requirements in their ability as mechanics are able to earn from $900 to $1,100 a year. Perhaps a skillful, steady mechanic is about "a $1,000 boy." If so, at 4 per cent he might be capitalized at $25,000. It is doubtful if the average unskilled laborer earns more than one-half of $1,000 a year. His earning power, say $500, if capitalized at 4 per cent, amounts to $12,500. If an investment of $2,500 in a couple of years would increase the capitalized value of a man by $12,500, it would not be so bad. But when that cost is not more than $600, and in two years can increase the capitalized value of a man's service by $12,500—more than twenty times the amount of the investment—is such an investment to be denominated "educational waste"? Instead of being rated as an "expense," money paid out for the trade schools ought to be considered as an investment; and if the school is managed with reason, and turns out a product of good quality, the investment should be rated as a good one.

The trade school is not meeting all the need of the community for vocational training; but it is meeting an important part of that need, and meeting it in an effective manner. It is meeting it, too, at a cost which is not unreasonable.

D. HOW SHOULD THE SCHOOL SYSTEM CONTRIBUTE TO AN INTELLIGENT CHOICE OF VOCATION ON THE PART OF THE PUPIL?

GEORGE PLATT KNOX, ASSISTANT SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

The limits of time and the scope of my paper do not admit of a discussion of the question: "*Why* should the school system contribute?" altho the temptation is strong to plead the advantages of the measures I shall propose, but I address myself at once to the proposition: "*How* the School System Should Contribute to an Intelligent Choice of Vocation on the Part of the Pupil."

The fields affected by the proposed activity are the child, the influences which make him what he is, and the life-calling which he is to follow. The public-school system is but one of the organized forms of society, and our problem is to minister to the need of the pupil intrusted to our care by pointing him as successfully as possible on his way. To accomplish the best results we must understand the child, be alert to all the other forces which influence him, know the facts of the vocations which he may enter and by continued instruction and sympathetic interest lead him to choose wisely and stimulate him to do his best.

We must not be content simply to direct the child, find a place for him, and launch him forth on his life-work, altho this process is easy compared with the better way. Our aim must be to bring the child to understand the real values in his environment and to detect the best opportunities open to him for a life-work, and then so far as possible lead him to choose intelligently which call he will follow.

It should not be our aim to determine for the child and his parent what he should do or into what vocation he should enter. Workers in vocational guidance should stand most firmly against the suggestion that we are to force the youth of our land into certain established occupations or trades according to a predetermined schedule or prearranged scheme. If we are true to our democratic ideals, we shall not permit any group of men or any authority to dictate what shall be the occupation of the child, nor should we ourselves make such an attempt. For any organized effort whatsoever to say that so many children may be taught a certain trade, or that this child may learn it and his neighbor may not, is a usurpation of function which must not be tolerated.

To choose wisely one's vocation, an appreciative knowledge of the immediate environment is essential, for altho there is so much movement today from place to place in the pursuit of a livelihood, the vital factors in the environmental conditions are really the same, even if they are more or less colored by geographical influences.

We must help him to understand the vocational opportunities open to

him. It is pitiable to what a large extent choice of vocation is made quite in the dark. If we can only give to our youth a fair understanding of the nature of the opportunities open in professional and industrial and commercial lines, we shall make a great advance over present lamentable conditions.

We must help the child to understand also the responsibilities involved in his vocational life, since they exercise so strong a determinative influence on his larger service as a citizen in a great democracy.

We must urge the value of preparation. One of the surest signs of a lack of wisdom in choosing a vocation is the evidence that the youth and his advisors lose sight of the far-reaching importance of adequate, patient preparation. This preparation should both precede and follow the choice of vocation. The choice will be much more intelligently made if preceded by studies in the relative values of vocations, while it is easily demonstrable both logically and statistically that after the choice is made time and effort devoted to preparation more or less specifically provided for the vocation chosen are most wisely spent. The general public does not see this, and it is a very large part of our opportunity in vocational guidance to lay emphasis on patient and wise preparation. This proposition rings true to the great thought of lengthening the period of infancy, and needs no championship on this platform.

We are not, in this paper, to discuss the propriety of the public school doing something, altho we know that we are hedged about by tradition and deterred by a certain sensitiveness arising from professional obligations fancied and real; we shall not concern ourselves with the feasibility of the scheme, altho we admit that we are restrained by legal rights and restrictions; we shall not stop to argue the question of its advisability, altho we are faced with a popular conception of the domain of the public school which is in many quarters very limited; we are set to consider what the public school *can* do and how best it should do it in spite of the charge so often brought against us that we lack initiative.

What, then, and how should the public school contribute to an intelligent choice of vocation on the part of the pupil?

In the organization of the work, very large attention must be paid to investigation, both preliminary and continuous. Investigation to be adequate must cover three great fields: the child, his environment, the vocations.

The child must be considered physically, mentally, and temperamentally, for not only is the welfare of the whole child at stake in this transaction, but the work will go astray if the factors which spring from these phases of child nature are ignored.

Investigation of the child may best be accomplished by enlisting both the judicious interest of the teacher and the trusting frank assistance of the parent. Neither the teacher nor the parent alone can make up a fair analysis of the characteristics of a child which will fit or unfit him for certain

occupations or professions. Ignorance of these characteristics is fatal to a wise choice. This work should not be haphazard and unorganized, but it must be made very definite and specific as to the points to be noted and the results must be made permanent and accessible to those who have a right to use them. This information should be gathered only by qualified persons and prepared and used only by competent parties. Efficiency is promoted by the employment of expert investigators who will secure from parent and teacher the information desired, but if this is impossible, at least the questionnaire should be prepared by the expert. With this chart as a guide, the teacher can evolve the information in conjunction with the parent. I wish it were my privilege to plead here and now for the propriety of placing this work in the hands of a public-school worker carefully chosen, who would bring to it the devotion of a teacher and the skill of a trained student of child nature, and at the same time be armed with the confidence of the public, without which there can be no large success.

Not only must the child be studied before he makes his choice of vocation, but he must not be lost sight of in case the school can hold him for better preparation. For the sake of the extremely valuable information to be gained only by experience, the youth who has passed out into his vocation must be carefully and persistently followed up, his successes or his failures noted, and his trials and efforts made a part of a record which shall guide those who later come to choose, to make their choice more wisely. For this work, a central office more or less specifically designated is desirable. It may be done by the principal of the school last attended, or by the teacher who knows the pupil best. The exact method depends upon the complexity of the school system, but the information is too valuable to be allowed to slip by unnoted.

Children who go to work by permit can be followed up by securing legal requirement upon the employers of such child labor that every case of discharge or of voluntary withdrawal shall be by them reported to some designated office. Such action also prevents the child thus quitting work from drifting about in idleness or loafing.

The environment must be investigated and should include a careful study of the usual factors: the home, the church, and the unorganized social influences. It may or may not be wise to have this portion of the study conducted by organized activities and made to take the form and nature of a general "survey" of economic and social conditions of the community. Such work is invaluable, altho it does not entirely meet the need of careful study of these phases of the environment of the individual child who is to receive guidance. A general survey conducted scientifically serves as the best basis for the rounding out and interpretation of the facts ascertained in the consideration of the individual case. We must have knowledge of the home conditions in which the child has developed. Are both parents living, are both present in the home and ministering to its

welfare, how many children in the family and how many already at work, the occupation of the father and other wage-earners, something of the nationality and school training of the parents, the present economic pressure bringing real or apparent need of early entrance of the child into his vocation, locality and housing of the home, its moral and spiritual tone, recreational habits of the family and of the child—these and other inquiries are most pertinent if the counselor is to assist the child understandingly.

Conditions of the church and larger spiritual influences on the child are commonly considered as outside the realm of proper inquiry, but careful consideration develops salient factors, altho they function indirectly.

Unorganized social influences have tremendous weight on the growing child. One scarcely knows where to begin. The street influences, in which all too often the child moves from school until bedtime, vary all the way from legitimate occupation, such as paper-selling, down to loafing and gang rowdyism. Then, the cheap amusement places claim their great army and with or without proper supervision our school children frequent popular amusements and absorb their not carefully chosen lessons so vividly presented.

A knowledge of the vocations is essential. The opportunities offered vary greatly with geographical and political influences reacting to make varying economic conditions, so that a study of the opportunities offered in one locality does not at all suffice for another community more or less distant. Here is where the local color comes in and necessitates a great amount of work before a fair grasp can be had on the problem. The points to be covered include the temporary and relative openings in the various professions and industries, and the conditions, physical and moral, which impose demands upon the time and strength and health and morals of the worker who enters. This investigation should include questions of wage, initial and future, of the opportunities of advancement to positions of commanding influence, the hours of labor, the sanitary conditions, with their effect upon the physical and moral health, the helps and hindrances in the opportunities for individual initiative and invention, and many other factors familiar to all who have watched the development of the problems in vocational guidance.

Present points of contact between the seeker and the opening offered must be investigated, such as the activity of employment agencies, official and unofficial, maintained from philanthropic motives or for private gain.

The provisions open for specific vocational training, such as professional schools of law, medicine, dentistry, etc., the so-called business "colleges" with their short-time courses, the plumbing schools, automobile schools, millinery colleges, dressmaking institutes, schools for the training of barbers or waiters, and the like, must all be critically examined and necessitate careful discrimination. Note must be taken of those occupations in which training is provided by the industrial concerns and by public utilities, such

as the telephone and street-car companies. Recognized institutions of college, university, and technical standing are, of course, most worthy, and the opportunities they offer must be included in a fair knowledge of avenues of training for the occupations.

All this material covered in my too brief survey must be collected by experts who are trained to see clearly and to judge wisely. It must be brought together, organized, and systematized also by experts. Further, it must then be recast into popular form so that those who are in immediate contact with the child—the teacher or the parent—shall be able to use this information effectively as tho it were a matter of their own investigation and knowledge. This organization and adaptation following after the investigation is a vital point, for it is a large part of the equipment of the counselor.

Before leaving this question of organization, we must consider the linking-up of the forces at work. There is room enough for all who care, but all the workers, philanthropic, official, and parental, should be organized and brought into co-operation so that there shall be no duplication of effort, no work at cross-purposes, no stumbling blindly in the dark when the saving information may be ready prepared, close at hand, and yet not known to the needy one. Here is one of the greatest points in favor of the organization of vocational guidance under the care of the public-school system, because without an authorized head to the work, the agencies interested fail of mutual appreciation and support and there is much loss of time and effort. With such an organization, the person in control not only gives specific direction, but communicates inspiration, disseminates information, and provides for the correlation of the workers as can be done in no other way. As I have said, there is room enough for all, but no effort should be wasted, and the energies can best be conserved and efficiency promoted by the single director who shall have behind him all the power and the prestige of the public-school system.

The complexity of the organization of the particular system must determine the specific office of this director. Whether the system be that of a state or county or of the rural schools, successful conduct of the work demands some *one directive mind*, who shall be able to see clearly the entire field of activity, and both vitalize the work and safeguard its efficiency. In the large system, the ability and strength of a director of vocational guidance will be severely taxed even with all of his time devoted to this effort, while under other conditions the county superintendent or school principal may well care for this in connection with his other duties.

Let us now pass to the consideration of the specific vocational guidance of the child. Simple direction or dictation may be accomplished in one interview, but not true guidance. Either the teacher knowing the child and informed about the vocation, or a worker knowing the vocation and informed about the child can in one interview accomplish much that is

desirable, but the guidance of the child vocationally is a matter of education as well as of information. Education takes time and involves training, and the preparation of the child for a wise choice of vocation can be done best by the schools.

Well down in the grades, even in the kindergarten, the life-work interest must be developed in keeping with the advancement of the child. Industry, commerce, and the arts are the sources of material, while number work and reading in the lower grades, arithmetic, geography, and history in the intermediate are the main processes thru which the child is equipped. Handwork plays a large and ever-increasing part in prevocational training. Supplementary reading and the library furnish rich food. The museum with its illustrative material makes its unique contribution. Classes from the schools should visit local industries, centers of trade and transportation, public utilities, etc., while from all these, and from the professions as well, competent persons should be secured to come to the school and there present vividly, either with or without illustration, the salient factors and conditions of their own vocation.

With all this material worked out in adequate methods and the teacher alive to her opportunities, even the child who must enter an occupation at the earliest permissible moment will leave the school with a considerable equipment for wise choice of life-work. Those who remain for the upper grades and the high school—and their number should be much increased when the life-motive is infused into all their work—will receive a larger view of vocational opportunities, especially looking toward the professions.

Such vocational content will be welcomed by the teachers, but its preparation must be accomplished by the supervisory office of the school system, preferably by the vocational director, who must be well trained in school work.

A further necessary equipment for wise vocational guidance is the preparation and dissemination of literature setting forth the facts secured by investigation. Some of the work already done in the gathering of material into printed form and published as charts and pamphlets has proven to be of greatest value. This printed information can never take the place of personal consultation between the teacher, the child, and the parent but it is essential as a preliminary source of information for teacher and parent.

Who shall serve as counselor to the child and parent when the time comes for decision? By all means the teacher, and by teacher I mean either the one in the classroom or the principal of the school, but in either case it must be one who knows the child, the vocational content in the course of study, and the material prepared from the investigations. It has been proposed to give over this personal consultation to an expert called in from the particular vocation, who, knowing the vocation, shall advise (and doubtless induce) as many children as possible during the visit. An address

to the students by such expert may be decidedly illuminating, but only one who knows the child can render the high service of properly guiding him in his choice of a life-work. As our school systems are at present organized, either the school principal should act as counselor or else a teacher in the upper grades who knows all the pupils and who is by virtue of the school work in closest contact with them should serve in this important capacity. In the high school, a carefully selected group of teachers may be given the work. Those teachers should be selected who *care most*, and who are temperamentally best fitted for this delicate task. For more is needed than simple advice—the pupil must be aroused, steadied in his choice, and then set on his way of preparation or, if it must be, inducted into the work with high purpose, clear vision, and large enthusiasm.

At this time of decision regarding the course to be pursued, the counselor should make every possible effort to urge upon the parent and the child the value of adequate preparation. One of the best results which it is hoped will accrue from vocational guidance is that children shall be held longer in school, and better still, with an added interest in their school work. Vocational guidance to be worth anything must, so far as consultation goes, be individual in character—one child at a time, with the parent in conference with the counselor. This process is necessarily very expensive, but if it results in markedly lengthening the school life and ministering to the school interest in the child, who shall say it is not worth while?

The conferences between child and counselor should be frequent, with the parent present at strategic times. The best place is the school building, the time to be arranged to suit the local conditions. In some schools, a vocation office is maintained with announced hours for consultation. For those parents who cannot come to the school or who are free only in the evening, opportunity must be offered for them to secure information and advice from the office of the vocational director who is in charge of the work thruout the system.

This central office must, in the nature of the case, be maintained by the public schools. From this office the work should be guided and the records of investigation should be kept here after they are prepared for use. It may well be the workshop of the experts in the preparation of the material gathered and the point of issue from which the investigators daily go forth in their work.

The teacher who is intrusted with the privilege of meeting the child in his guidance, vocationally, must add to a ready interest and abundant enthusiasm a certain amount of skill. While much can be gained from experience only, one of the strongest avenues of effective work on the part of a vocational director's office is the systematic training of the counselors, either by regular meetings or by repeated conferences, or still better by both. The directive head of the work should minister to the worker by a consistent course of training and a never-failing source of enthusiasm. The

counselors may well be organized into committees for mutual assistance, and general meetings for discussion of problems have proven to be of inestimable value.

Possibly thru the avenue of the interest of the child we can best touch the parent and enlist his co-operation. The parent must be reached, and only when we interest all those who have children in our schools and influence them effectively, can we feel that we are really occupying the field. Printed literature does much good if carefully disseminated. The vocational director can give splendid service thru enlightening the community and arousing enthusiasm by means of addresses, illustrated talks, and popular press articles.

Employers must be enlisted and their co-operation enjoined in vocational guidance. The experience of the workers who are already engaged proves almost without exception that employers are easily interested and are glad to co-operate, both for the help they can give and from the fact that their own welfare is advanced by such activity. This also requires careful planning and wise direction of the details involved.

The central office of vocational guidance, appointed and sustained by the public-school system, may or may not engage in the actual work of placing the child. The question of the maintenance of an employment bureau by this office is debatable, and with the advantages and disadvantages so nearly equal, no solution is yet ready. But the employment bureau either should be maintained by the school system, or, if by private parties, should be in some way absolutely under the control of the public-school vocation office. If the state maintains an employment bureau, it should work in harmony with this vocation office, either by legal enactment or by official agreement.

Either with or without an employment bureau, careful attention must be paid to "follow-up" investigation, as earlier outlined. Some of the most valuable information can be secured by watching closely and recording the careers of the individuals after they have entered their vocational life. Questions of permanency, of advancement, of adaptability, of advisability can best be considered in the light of information thus gleaned.

The great American public believes in its schools and trusts its school officials. Activity in vocational guidance will be welcomed by the community at large and it is easy and advantageous to organize committees of public-spirited men and women to co-operate with the school vocation office and give assistance which is invaluable in the way of advice, sympathy, and support. Here again local conditions must determine the form of the organization.

Finally, experience only will give us the wisdom best to conduct this work. I believe very strongly in the advantage of a central office maintained by the public-school system in which all parties at work in vocational guidance or in investigation leading thereto shall be sympathetically and

organically connected. True vocational guidance includes consistent training of the pupil in the school and at the critical times personal consultation with the sympathetic teacher his counselor.

Investigation, organization, co-operation, devotion: these four, and the greatest of these—devotion! The youth of our land call us to ever renewed effort in their behalf. The wide-open door of opportunity for us public-school workers is today labeled "Vocational Guidance." Let us thoughtfully, carefully, bravely, and devotedly enter in!

E. THE EDUCATION OF GIRLS

LORENZO D. HARVEY, PRESIDENT OF STOUT INSTITUTE, MENOMONIE, WIS.

A generation ago discussion waxed warm upon the question of the physical and mental ability of the girl to do the work prescribed for her brother in the higher educational institutions, in the same time and in the same way that he was to do it. The opening of the doors of these institutions to women on the same basis as to men, and the success of the girls in them, is a sufficient indication of the answer to that question. The discussion has practically been closed. The girl has demonstrated and is demonstrating her ability to achieve success in the highest fields of educational effort. But the settlement of that question has not settled the other—whether the girl needs and should have the same education as the boy. Until very recently, the organization of school systems, the framing of courses of study for elementary and secondary schools, and of the curricula of higher educational institutions have proceeded upon the assumption that the needs of the boy and the girl in education were the same, and to be met thru the study of the same subjects. These subjects were chosen and their scope determined almost solely with reference to the boy. It was left for the girl to proceed along the same line if she were to proceed at all. Some men and many women have argued effectively for the right of the girl to follow in the educational footsteps of her brother—until that right has been conceded. In recent years, the question as to whether this is the only right to education possessed by the girl has been coming to the front, until today it is one of the most important questions to be considered in connection with the development of our educational system. Some concessions have already been made—the introduction of sewing and cooking as subjects of instruction in many public and private schools is a slight recognition of the fact that the girl needs for her training something that has no place in the training of the boy.

The elective system in the higher educational institutions, coupled with the conservative admission of subjects that might be attractive to girls, if not to boys, and the election of these subjects by many girls, is a further recognition of this difference in needs. A serious consideration of the question discloses the fact that an adequate differentiation of the materials,

means, and methods to be employed in the education of girls and boys has not yet been made. We have been for years multiplying special, technical, and professional schools of varying aim and scope to fit boys and young men for the active duties in life, growing out of changed industrial, social, commercial, and political conditions. These schools have come into existence because of the demand for that kind of education which shall fit young men to do what, by reason of their manhood, they may do, and by reason of the requirements of society, needs to be done. Many of these schools throw their doors open to women, and a few women have availed themselves of the opportunity thus afforded. They have not proved attractive to girls in the same measure as to boys, for the reason that the world recognizes certain classes of work as peculiarly men's work, and other classes of work as peculiarly women's work. That some women and fewer men do not recognize this distinction does not alter the situation. If a woman conceives herself able to do the work which society at large has regarded as the work of a man, she has an opportunity to fit herself for it, and if she can find employment, she is at liberty to engage in it, but the fact remains that her entrance upon this field of activity is only an incident. With the man it is a life-work—with a woman it is liable to be interrupted at any time by the demands of her womanhood for home and family life. Few women have the physical and mental strength to meet the demands of the home life and the demands of a vocation or a profession outside of the home, and win success in both. That one occasionally does, is no warrant for assuming that it is a general rule. That she wins success outside the home at the expense of the home life is an admission of failure.

The immense broadening of the field of educational effort for men in recent years is not an accident. It has come because we have been studying the needs of the individual, of society, and of the state. We have been finding out what a man needed to know and do in order to measure up to these demands, and have been framing courses of instruction to more definitely fit men to do this work. We need to study the question of the education of girls seriously, and from the same standpoint. What a boy needs to know and to do to fit him for success in any of the useful activities of life upon which he desires to enter is the basic element in determining the character of his education. What a woman needs to know and to do in order to meet the responsibilities that come to her in life is the basic element in determining what her education shall be. There is an immense amount of work needed to meet the needs of society that a woman cannot do and ought not to undertake, but which a man can and ought to do and do well. He should be fitted to do this work. It is a waste of time and energy to try to educate a woman for that work. There is an immense amount of work needed in the world which a woman can do and which a man cannot do and ought not to undertake. The absurdity of trying to educate him to do the work for which he is unfitted by reason of his sex has been recognized, and

it has not been attempted. There are many lines of work needed to be done in the world which men and women may do equally well. Equal opportunities should be given for the education of each in the direction of efficient performance of these lines of work. In the lines of general culture and training, the education of men and women may be the same—but in so far as their work varies and demands special knowledge, differing in one field from that in the other, in so far as effectiveness in action depends upon special training required in one and not in the other, the necessity for differentiation exists.

Today we are realizing as never before the lack of efficiency in the vast majority of those who do the work that society demands. If the possible efficiency of the farming population were realized, the products of the soil now under cultivation in the United States would be increased at least 100 per cent. We are beginning to realize this fact, and hence the demand from all parts of the country for the sort of education for the country boy and girl that shall hasten the development of this efficiency. The manufacturers realize the inefficiency of their employees of every grade, and these employees, if they do not fully recognize their own inefficiency, see the lack of those kinds of educational facilities necessary to develop efficiency in their children, and they unite with the manufacturers in demanding a place for industrial education.

The great transportation companies are admitting the lack of efficiency among their operatives and are providing the educational machinery for securing it. Workers for civic and social uplift find themselves handicapped by the inefficiency of the agents thru whom they must work, and in response to their call for help, educational agencies are being provided to develop competent workers in these fields.

The impulse of this awakening to the call for efficiency is felt everywhere thruout the length and breadth of the land, and the demand is becoming more insistent every day for such a broadening of educational means and ends as shall make it possible for those who are to do the work that society needs to have done, to acquire the knowledge and training essential for efficiency in the doing. The demand is no less for the cultural element in education, no less for the highest professional and technical training for those who have the ability and inclination to secure it, but there is an added demand for the millions who have neither the ability nor the inclination to secure this training—a demand that educational effort shall be directed toward preparing these millions to do something well that needs to be done in order that they and society may both be benefited by their increased efficiency in doing. A narrow range of useful knowledge coupled with efficiency in its use is better for the individual and for society than a wider range of knowledge, useless or useful, without efficiency in action.

The home is the unit of society: within it are found influences and forces that are most potent in shaping the life of the individual, in deter-

mining the state of society and the character of the national life. From it have come the millions who constitute the population of this country. From it come every year more than two million new-born citizens. Within the next decade there will be born more than five times as many children as there were souls in this country when we became an independent nation, and two-thirds as many as there were people living in the United States when the Civil War began. Thru infancy, childhood, and early youth, the care and nurture of the individuals composing this vast army is a most important part of the work of the home. The physical condition, the shaping of tendencies, the character of habits formed, the mental and moral development of the child, the promise and potency of later life are influenced most profoundly, one may say are determined almost exclusively, by the influences of the home life. Are these influences and forces of sufficient importance to demand intelligent effort to prevent their being left to be the sport and play of ignorance or accident?

How much is involved in the two words *care* and *nurture* of the child! For its proper care, there must be intelligent action, and intelligent action must be based upon a knowledge and proper care of the physical organism of the mother and her child; of what is essential for both for the best physical development of the infant, and later, of the child considered solely as a healthy animal.

It is thought to be necessary for a farmer who would raise hogs or poultry successfully to study the structure and organism of each type, the properties of foods best adapted for their development, the preparation of these foods, the proper times for feeding, and the variety and amount of food to be given at different times and for different purposes. Few realize how much more difficult is the problem of feeding the child. It comes into the world perhaps the most helpless of new-born things. Of the two million children born annually, one in six dies before the end of the first year; one in three by the fifth year. Boards of health, physicians, and scientific experts who have investigated this subject unite in declaring that a large percentage of this death-rate is due solely to ignorance on the part of those responsible for the feeding of the child.

It is impossible to say how large a proportion of the illness of adults in the home is due to the same kind of ignorance—ignorance of what is proper in food, of what is proper in its preparation and care, and of what is essential in amount and kind to meet the varying needs of the older members of the family.

Connected with this single problem of feeding the family is another of no small importance, and that is the economic problem. The bearing of this problem on different members of the family is one of vast social and industrial importance. Proper feeding of the family, when no account has to be taken of expense, is a simple proposition compared with the proper

feeding, when at every moment the lack of money makes wise choice and proper preparation of food a much more difficult problem.

The health of the different members of the family as affected by other causes than incorrect feeding is a matter of vital importance. Knowledge of the proper means for the prevention of disease thru proper sanitary conditions in the home, proper care of the person, and of means for the prevention of bad effects from unavoidable exposure, immediate treatment in cases of accident, and the proper nursing in case of illness are essential for the proper discharge of the responsibilities of the homemaker.

Sanitary conditions in and about the home as related to heating, lighting, ventilation system, water supply, sewage disposal, and care of drainage system, are factors affecting the health of the family.

The clothing of the family, involving wise choice with reference to economy, adaptation to needs, durability, care, and pleasing effect, is another subject demanding a wide range of knowledge and skill in order to secure the best results.

The housing of the family, involving wise selection of furnishings and decoration, is another responsibility devolving upon the homemaker, requiring special knowledge of wide range in order to secure the highest degreee of comfort and æsthetic effect at a minimum cost.

The development of the child's mental power and spiritual nature while in the home, in such manner as to fix tendencies and develop characteristics essential for the best and most complete later development, is a problem that may well tax the mind of the wisest individual.

This is a brief tho fairly comprehensive statement of what may be regarded as the most important of the duties devolving upon the homemaker. That these duties may be discharged with efficiency is essential for the well-being of the home, of each individual in it, and of society at large.

Who is the homemaker? She is the girl who is to be educated today and who, as the woman of tomorrow, is to assume these responsibilities. The home is a universal institution; it is found everywhere; practically every human being has come from it, and has been affected for good or ill by its influence, its direct or indirect teachings. More than three-fourths of the women of marriageable age assume sooner or later the responsibilities of the homemaker. It is the one occupation which is most universal for the woman. The perpetuity and well-being of the race depend upon the maintenance of the home and upon the proper administration of its affairs. Practically every woman looks forward to the time when sooner or later she shall assume the responsibilities of the home, and, for the great majority of them, that time will surely come; and considering their importance to the race, it seems an inevitable conclusion that no education for the girl is adequate which does not take these responsibilities into account and

provide for such instruction and training as shall insure their effective discharge.

It is sometimes argued that the place for the girl to secure this knowledge and training is in the home. The complete and sufficient answer to that argument is that she does not there secure it, and that her mother is not competent to give such instruction and training, even if she had the time and inclination to do it, and if her daughter had the time and inclination to secure it. Every phase of knowledge indicated as essential for the proper discharge of the duties of the homemaker is capable of being organized for instructional purposes and it may be taught in the school. If it is not dealt with there, it will be dealt with nowhere in any adequate manner.

The woman's instinct is sometimes spoken of as a safe guide in all these matters, but in view of the results obtained, and in view of the truths of biological science, such a claim is too absurd for consideration. Not all of these matters have as yet been properly organized as pedagogic material, but this is rapidly being done. The great problem is to find a place in our present school organization where that work may be done.

It will doubtless mean the elimination of some subjects from the curriculum which girls have been required to study, not because the study of them best ministered to their needs, but because of tradition, harking back to the time when courses of instruction were organized for boys upon the theory of general culture and training.

We do not meet the situation by providing means for general culture of which at best only a limited number of girls can avail themselves. We recognize the need of special education of the masses to fit them to do something well. We are pressing vigorously for the development of this special education for efficiency in action in the agricultural, commercial, and industrial world, but we are practically ignoring the claims of the most important vocation in which human beings can engage and in which a larger number are sure to engage than in any other vocation that can be named. We hear on every hand the claims for special education for the eight million wage-earners, women and girls, to fit them to earn a larger wage and to better their social and industrial condition. Too much cannot be said upon this point and yet we are ignoring the fact that by the majority of these eight million wage-earners, the present vocation is regarded as temporary, a mere makeshift until the opportunity presents itself to assume the responsibilities of home life, and that for the assumption of these responsibilities they have had practically no preparation whatever. The woman is the homemaker, the wide range of activities demanded of her in this field of effort, the vital importance of these activities to all concerned demand special preparation which she is not now receiving. The welfare of society, the well-being of the nation depend upon the efficiency of the woman in the home, and that efficiency depends upon special education for such efficiency.

VOCATIONAL GUIDANCE

MEYER BLOOMFIELD, DIRECTOR OF THE VOCATION BUREAU, BOSTON, MASS.

Vocational guidance is not a new thing. What is new about it is the intelligent and energetic effort now going on thruout the country to organize such counsel, information, and safeguards as shall adequately protect the young people of our land during the critical passing from school to work.

The widespread interest in this matter of better bridging the transition period from the shelter of school life to the strange liberties of wage-earning indicates an appreciation of what is taking place and a deep-seated desire that the present waste shall cease.

At the time in life when our children most need watchful care and wise assistance a vast number of our boys and girls leave school in the various grades and take their plunge into working life.

There are kindly teachers, of course, whose personal help has started many a boy or girl up the ladder of success; there are homes which still help shape the future of the child. But nobody acquainted with the heavy professional duties of the modern teacher, the difficulties and the struggles of the parents, particularly in our cosmopolitan centers of population, and the technical complexities of modern commerce and manufacture, with all their specialization and subdivision, can for a moment believe that the chance advice and help of the average parent, teacher, or busy man of affairs is at all adequate to deal with the present situation.

That thousands of children drop out of school, thru no economic pressure, to go to work as soon as the law allows, we well know. An intensive study typical of what is going on everywhere is to be found in Volume VII of the United States Bureau of Labor reports on the women and child wage-earners in the United States. It is entitled "Conditions under Which Children Leave School for Work." This study of seven carefully selected towns in the North and South proves that only about one-third of the children who left for work needed to do so. The other two-thirds could have remained.

In many cases the parents have had no voice in this decisive step. Indeed, we all know of instances where the parents did not even know that their children had left school and were at work. If any fair number of those so leaving were in occupations where they could develop, learn something, amount to something, matters would not be so serious. But this is not the case. How can untrained and unguided children find their best opportunity? How can they possibly know where they are going to come out in a few years, there being nowhere at hand the information which can spare them years of drifting, waste, and too often tragic demoralization?

To understand an occupation from the vocational-guidance standpoint is no longer the simple matter it was in the days of Benjamin Franklin,

when his father took him on a round of inspection of shop, factory, and other workplaces in order to influence the boy's choice of a life-pursuit.

Were such excursions more common today, an inspection such as this would not necessarily reveal the facts one needs to have in order to judge an occupation intelligently. In the first place, consider that the making of a coat in a highly organized clothing establishment involves twenty-five and more different workers, each of whom is specializing in his own partial operation. This is true in the making of watches, pins, shoes, and other commodities; it is true in retail business, and it is the process now radically modifying professional pursuits.

But even an understanding of these subdivisions does not begin to tell the whole story. There is a growing literature on occupational diseases, industrial hygiene, public-health reports, actuarial statistics, and monographs dealing with the relation to the worker of certain operations, work conditions, fatigue, nerve-exhaustion, and general enervation. There is a considerable body of economic literature dealing with the changing demands of certain articles, and with the changing conditions and opportunities, the displacement of manual labor by machinery, of child labor by adult labor, boy work by girl work. There is a mass of social literature dealing with the moral influences of certain employments, their mental and ethical consequences. All these things and more need to be understood by somebody somewhere in order to end the present gambling in their own futures by so many thousands of our children.

Equally necessary is it to realize what the training should be for those who would enter the desirable employments. Nothing can be more misleading than the initial high wage often paid to the fourteen-year-old in occupations which take so much out of their young workers. Our studies in the vocations open to Boston boys prove that the occupations which hold out any future to their young workers often start them at a fraction of the wages paid where advancement is practically impossible. We further learn that the most desirable employments want better-fitted and more mature workers than do those which teach but little. Would not many parents sacrifice even more than they do could they be shown just where their children would come out after three or four years of work? Would they not co-operate with the schools in keeping their children longer under a system of training carefully planned to start their boys and girls on a higher plane?

Over three thousand families in Massachusetts told the investigators of the Commission on Industrial and Technical Education that they could afford to give their children vocational training.

Sixty-six per cent of the families investigated said that their children could have continued in school; 33 per cent of the children were found in unskilled industries; 65 per cent in low-grade industries; less than 2 per cent in high-grade industries.

This is not at all surprising. The boys leave for a job, not for a vocation. They leave one job after another, attracted by all sorts of reasons except that of fitting themselves for a life-work. This drift from place to place spells sheer waste to the employer, the child, and the community. And at the time of life when serious responsibilities of life begin these youth are unfitted for permanent and profitable employment.

If we need statistical evidence of the consequences of this aimless entrance into wage-earning, thru the only open door of undeveloping jobs, we need only read some of the evidence before the Royal Commission on the Poor Laws. There is unanimous testimony to the effect that the chaotic state of affairs which confronts the young people who drop out of school is daily manufacturing that most pathetic class of English poor, the unemployables. We have them here too; they are in the poolrooms and street corners of our towns, they are before the courts daily, they are crowded about the want-ad bulletins of the daily papers and drifting about the employment agencies, both public and private.

I have described only what is occurring among the fourteen-year-old children; among those who get their working papers as soon as they can. To a marked degree there is a similar want of plan and intelligent choice among high-school and even college students. Until the precious years of schooling minister more definitely and aggressively to the life-work interests of the pupils, until we awaken in telling form the motive and provide the material for a better launching into bread-winning pursuits, we shall see continued the present human waste.

What has vocational guidance to suggest as a practical way to cope with this situation? Every intelligent school official, parent, and teacher admits the value of scientific educational and vocational information. There is no argument as to the need of wise and well-informed assistance.

How shall we organize this most effectively? Doubtless there are more right ways than one for helping young people to find themselves, and I shall describe the Boston plan as a suggestion toward one way.

First, as to what we are not attempting to do. We do not prescribe or decide a particular occupation for anyone. This is the business of the parents and the natural protectors of the child at home. Decision must come from within and not from without. We are not trying to divert anyone from any class of pursuits or to direct particular attention toward them. It is not the business of vocational advising to favor or disfavor occupations. It is primarily its function to know the facts, analyze, classify, simplify, and apply them, where they will do most good. Let the facts speak for themselves, but drive them home. The responsibility rests on the shoulders of those who make the decision. But knowing the facts is no child's play, neither is their skillful dissemination.

In Boston we have made up our minds, first of all, that the public school is the logical starting-point for vocational advising. Here the best

preventive work can be done; here there is the best foundation for that co-operative decision in deciding upon a life-work which brings the various child-welfare agencies into service for the individual child. Moreover, the child is under constant observation here and family problems make themselves known in countless ways.

The first step was to appoint in each school some teacher or assistant principal as the vocational adviser for that school. This fixed a certain responsibility and made a point of contact between our vocation bureau, a philanthropic body, and the teacher. For two years we have met regularly to hear the best representatives of various trades and professions tell in an intimate way about their particular callings. Many questions were asked, and the notes taken by the counselors at these meetings were often used for classroom work. The range of employments thus presented has positively enlarged the teacher's visions of the world of work, and the child and its endowments are better understood thru this concrete study of occupations and the types of employers presented as speakers. In all cases the educational foundations for success in this or that pursuit were definitely brought out, and the close of the last school year showed an unusual amount of educational advising, counsel as to the kind of high school or other training opportunities to choose in order to advance in this or that desired calling. A wider range of choice, a wider sympathy with a larger variety of employments, has resulted. There can be no question that the work thus far has directly enhanced the appreciation of what more education could offer.

Supplementing this work we began to put into booklet form our studies of the typical vocations open to Boston boys. Here is concrete and practical material for choosing a life-work. Here is a navigating chart for youth seeking a port. Again the educational foundations of efficiency and success are clearly analyzed and brought out. So far from directing the children's minds away from school to work, the very opposite is the result achieved and intended. We join here with school and employer in helping to lift the boy or girl from a drifter to a learner. These booklets cover a number of points of interest. The Boston superintendents are now planning to incorporate this material into the regular courses under a heading to be called "Contemporary Boston—Civic and Vocational."

Actual placement is not yet attempted because it will take some years for these principles underlying vocational guidance to find themselves in such common practice that there will be little danger of opening the doors to a new form of child exploitation. Some time will be required to produce an adequate vocational survey of the community, and some time will be required before we can develop enough trained vocational advisers who can be intrusted to do this work on full time. In Boston we believe that the time has come for specially preparing those who are to serve the schools as vocational advisers. Thru Harvard University we are laying founda-

tions for a training course in this service. The Boston teachers as the result of two years of study and thought in this subject now recognize the need of a body of expert auxiliaries to do this particular work. Indeed they now openly and generally ask for the appointment of special counselors and the establishment of a vocational-guidance department. Note that this demand comes from within, from the rank and file, from the children's most devoted friends who want to co-operate and who realize the size of this task of counseling.

Three picked teachers from the group of counselors are detailed this year to give their time to the needed investigations preparatory to such a vocational-guidance department. One is planning a new organization of the employment-certificate department. The superintendent has assigned her to study the methods of granting working-papers. The thought is to do this work in a way to help the child who must go to work with advice, medical examination, and vocational information. This work will not stop here nor begin here. Back in the grades children who are likely to leave will be discovered and helped in every way to stay longer, or to continue their development if they do leave. The other two are investigating the careers of those who left in certain schools five years ago, and those now leaving and why.

Vocational guidance does not proclaim itself as a solution of all the serious problems confronting the child at work. But it has within its possibilities hitherto unused relationships between the employer and the school. The changes going on in schools are no more significant than are those in the field of employment.

How does the business man view this movement? More and more the public-minded employers are realizing that the high percentage of constant turn-over of employees, the incessant shifting and restlessness, are an economic waste for all concerned. While changes on the part of beginners often lead to slightly better pay and opportunities, in the long run the results do not indicate any substantial gain in the direction of permanent life work. Most of the drifters find themselves at the threshold of manhood at an *impasse*. To the industries which are learning the value of a permanent and progressive body of employees these continual replacements of employees count up in definite losses and inefficiency.

How about the dead-end or blind-alley occupations, which cannot provide in their operations for stimulus or development of any kind? Here we must stand squarely for the proposition that so far as law and public conscience can avail, no youth shall be permitted to suffer an arrest of growth because of industrial maladjustments. In these employments above all others, compulsory training opportunities must be provided during the only hours when a night school for the young should be in session—the daylight hours. In Massachusetts the State Board of Education is investigating the educational needs of working children between fourteen

and seventeen in certain typical employments where a large number of young people are in work not particularly educative.

Whatever may be the final solution, whether thru compulsory continuation schools, drastic reduction of working hours, improvement of work conditions, social scrutiny of employment, and the exclusion from all industry of the fourteen to sixteen-year-olds who are admittedly unprofitable to the employer in legitimate callings and unprofitable to the community in parasitical callings, we must hold fast to the proposition that no occupation shall "graft" on the service-resources of our youth.

We go to great pain and sacrifice to fit our boys and girls for the job; we want the job to be fit for the boy and girl. We want to give the world of work the best trained, best advised, and best prepared corps of workers we can turn out; we ask that this investment and this equipment shall be not ruined, even if not enhanced.

We stand with the employer in a demand upon the individual for efficiency; let it be social as well as individual. The employer will ask more and more of the school; the school will ask more and more of the employer. School life and working life must co-operate to make of the student an efficient producer, to make of the efficient producer a responsible consumer and a serviceable citizen.

THE SCHOOLHOUSE AS THE CIVIC AND SOCIAL CENTER OF THE COMMUNITY

EDWARD J. WARD, UNIVERSITY OF WISCONSIN, MADISON, WIS.

"This is going to make the neighborhood feel like home in spite of telephones, newspapers, trolley cars, and all the modern improvements."

He was a banker who spoke and the occasion was the opening of a schoolhouse as a social center in a middle-western city.

"When I was a young man," he went on, "back in Licking County, Ohio, folks used to meet like this in the old drab, weatherboard schoolhouse. We called it the 'Literary'; in some places they called it the 'Lyceum' and in some it was just 'schoolhouse meetings.' The old double seats weren't any too comfortable; the light from the kerosene lamps, with their tin reflectors, wasn't any too good, but there was a human spirit in those gatherings, a man-to-man frankness and democracy that *made America mean something* to us young fellows. And there was a spirit of neighborhood there—not only in the sociables, the spell-downs, and singing school, but in the meetings where folks just listened to speakers, and talked. Getting together about things we had in common, whether it was what kind of a bridge we should have across the creek, or the tariff, we felt a first-hand responsibility for being citizens.

"I came away to the city. I got into the scramble. I've been at it as

hard as anybody, and I've succeeded fairly well. But all the time there has been something missing. I know a lot of fine people, but I don't know my neighbors. I obey the laws and vote at election time, but somehow I don't get the *feel* of being a citizen. The fact is, I've lived here twenty years and it has never felt like home. But tonight when we're getting together, not as a party nor a sect, nor as a particular social set, but just as folks, as citizens, as neighbors, in this building which embodies the greatest of our common interests, that old feeling comes back, and as we go on with this —I tell you—even the city is going to feel like home."

Unlike most of the great significant movements in modern days, the movement to make the schoolhouse the civic and social center of the community appeals most strongly to the older, more conservative American.

The statesman, recognizing the fundamental importance of making the schoolhouse the citizens' common-council chamber, the working-center of an alert and self-informing common citizenship organization, welcomes this movement by as much as he recognizes the truth of Washington's words: "In proportion as the structure of government gives force to public opinion, it is essential that public opinion should be enlightened." And Justice of the Supreme Court Charles E. Hughes says, "I am more interested in what you are doing and what it stands for than in anything else in the world. You are buttressing the foundations of democracy."

The religious teacher—the priest, the minister—grasping the vital relationship between the leisure activities and the moral life of the community, welcomes the movement to make of the school building a common center of wholesome recreation. And we find not only that religious associations officially indorse the opening of the school buildings for use in the evening, but in many communities the chief promoters of social center development are the clergymen. For instance, in the little town of Stanley, Wis., the use of the high-school building as a "Peoples' Club House" came as the result of the united leadership of the Lutheran pastor, the Roman Catholic priest, and the Presbyterian minister. The Rev. Richard H. Edwards says, "It is unthinkable that the churches should oppose the social center movement."

The artist, recognizing that the worthy expression of the American soul in forms of beauty can come only with the cultivation and expression of music and the drama in an atmosphere democratic and free from the merely commercial motive, sees the vision of the use of the common schoolhouse as a democratic center of artistic culture and expression for the whole people. And Forbes Robertson says, "This is a program worthy of America."

School superintendents, principals, and teachers recognize that this movement to make the schoolhouse the comprehensive common center of the community means improved architecture, better equipment, more

vital interest, and increased support for the school in its present service. The National Education Association has unanimously indorsed this movement; and in a hundred communities school principals and teachers are lending their service in promoting community gatherings of one kind or another which look toward the full community use of the schoolhouse.

But not even the youth, for whom the social center means gymnasium, games, and club opportunities which otherwise he might not have, welcomes the social center with more keen appreciation and zest than do the older men and women in the average community, for to them it is not only an advance, it is also a restoration.

Two generations ago, in the average community in the Middle West, and quite generally thruout the country, the schoolhouse began to be used, not only as a center for the education of the children during the day, but also in the evening as a center of democracy, a center of recreation, a center of neighborhood.

Histories have to be rewritten continually as our viewpoint shifts from that which regards only military exploits as important, to that which emphasizes constitutional changes, and then to that which looks for industrial developments, and finally to that which gives full recognition to the social life of the past.

When an American history shall be written from this more intimate point of view, it will be recognized that nothing in our national life has done so much to foster the American spirit of democracy, of spontaneous community feeling and sense of solidarity as this free association of citizens upon the common ground of civic interest, of recreation, and of neighborhood in the schoolhouse in the early days.

Only in a time of social strife and strain can we fully value the common ties of civic unity and friendliness. It was at the verge of the Civil War that Lincoln used these words:

> We are not enemies but friends. We must not be enemies. The mystic chords of memory stretching from every battle-field and patriot grave to every living heart and hearthstone all over this broad land, will yet swell the chorus of the union when again touched, as surely they will be, by the better angels of our nature.

In those words Lincoln recognized, as the strongest force that made for unity, the memory of how the fathers united in the common cause of the nation's independence. If in the face of the straining social and economic problems of our time, of the divisive, separating tendencies, we take account of the uniting memories of democracy and good-will, there is none so powerful, so characteristically American, so all-inclusively friendly as this common tradition of how we used to get together in the schoolhouse evenings for spell-downs and singing schools, and for first-hand discussion of common problems. In this memory today is most vividly expressed

> the true democracy that batters down the walls that separate us from each other, the walls of caste distinction and prejudice, and hatred and religious contempt.

In this common tradition is brought to us

the proof that we are all of one blood, one bounden duty, that all these antisocial prejudices are as shameful as illiteracy and that they will disappear as soon as ever we shall come to know each other well.

The schoolhouse in the simple primitive community began to be the focal center of the common life. But as the community grew older, and especially as it grew more populous, there came in the wedge of division, of separation, of specialization.

Instead of assembling to talk about political questions as matters of common interest, we separated into mutually antagonistic partisan organizations. We gave up the use of the schoolhouse as a citizens' common-council chamber. We gave up the common ground of friendly man-to-man understanding in politics. We gave up the real headquarters of popular government in a democracy. And instead of meeting to reason about and understand politics, as "the science of government," the field of common interest, we have made that word synonymous with partisanship.

We separated also in the pursuit of pleasure and the use of leisure. We formed the specialized library and art gallery, the specialized dramatic center and music hall. Failing to develop our recreational life as a community expression, by expanding the use of the schoolhouse where it began, we gave over our recreation largely to commercialized exploitation and the wholesome play instinct became the prey of the saloon and the vice resort.

And with the civic cleavage and the recreational diversity, came the utter break-up of our community social organization and we went apart to satisfy our outreaching friendly instincts by various sorts of exclusive cliques and circumscribed brotherhoods and fellowships. Abandoning the use of the schoolhouse as a common social center, we lost the power to think in terms of the community, the very word society became restricted in its use, and we began to develop pride in the myopia of exclusiveness.

In other words, we yielded to the centrifugal force which flung us apart in the following of special party leaders, the pursuit of special recreational interests, the development of special association tastes, until these things which would have been the means of binding us together and unfolding our unity, had we kept them in co-ordination, have become means of our separation, our mutual exclusion and misunderstanding.

So, from being a common civic and social center, this community building became simply the education place of the children.

If instead of abandoning the civic, recreational, and social evening uses of the schoolhouse by adults and older youth, these uses had been promoted and developed and the use for the children had been given up, we would be wise to ask whether this common social machinery half used would be doing its full service, just as, having developed the children's part of this building's use, we are beginning to ask whether this half of a community institution is making good.

A few years ago, before the Connecticut State Teachers' Association, President Eliot said that compared with what was hoped would result from the establishment of the common school, this most important of all our institutions is a failure, and he gave a catalog of some ten of the common evils of our time, which the public school fails to right. These evils may be grouped under three heads: misgovernment in place of intelligent democratic efficiency, dissipation and idling in place of constructive use of leisure in recreation, cleavage and class feeling in place of social order and public spirit.

This is a tremendously serious charge, for the distinctive success or failure of America lies in our efficiency or failure in collective self-government, our waste or good use of free time, our capacity or failure to weld a harmonious whole out of the varied elements of our population and to produce a race of socially conscious men and women, the maxim of whose choices shall be the common good.

But before we lay the blame for failing to develop citizenship capacity, power for better use of leisure, and social consciousness upon the teaching of the children in the schools, it is well to see whether the public school as simply an education place for the child is not so limited in its essential nature that it cannot meet these needs.

The public school as an institution for the education of the child has, of course, its great service to perform, than which nothing can be more important, but granting all possible improvement in personality of the teacher, in equipment, and in method, the public school as an education center for the child does not and cannot meet these civic needs.

The public school as simply an education center for the child does not and cannot produce "good citizenship," for in its nature as such it is and must be a monarchy, a place of training in obedience. We may veil and soften the authority into the most careful fostering guidance, as Froebel did and as Madame Montessori does, but the authority must be there and the law of the school must be obedience. Now "good citizenship" is more than obedience. Good citizenship in a democracy is the consciousness of responsibility not only for obeying the government, but for participation in *being* the government.

It is only thru the use of the school building as a civic center, that is, thru its use as a citizens' council chamber, a legislative assembly place, and a final supreme court room, that this common institution can serve America's greatest need in the development of a positive consciousness of democracy. Years ago, John Stuart Mill said, speaking of such public association on a common ground:

> Where this School of Public Spirit does not exist scarcely any sense is entertained that private persons owe any duties to society except to obey and submit. There is no unselfish sentiment of identification with the public. Every thought and feeling, either of interest or of duty, is absorbed in the individual or in the family. The man never thinks of any

collective interest, of any objects to be purchased jointly with others, but only in competition with them, and in some measure at their expense. A neighbor not being an ally nor an associate, since he is never engaged in any common undertaking for joint benefit, is therefore only a rival.

This responsibility for the use of the schoolhouse for the development of civic capacity cannot be shouldered off upon the child. We shall not cease to regard the government as being located at Washington, at the state capitol, or at the city hall—we shall not get the democratic point of view and sense of responsibility except as we make the schoolhouse the headquarters of an organized citizenship where men frequently assemble to discuss together and with their public servants the problems of democracy.

Not long since, President Taft spoke before the "Ohio Society" in New York City against the proposed placing in the hands of the citizens of the power to recall the judiciary. No doubt President Taft would agree with Lincoln when he says: "Why not repose patient trust in the ultimate justice of the people? Is there any better, is there any equal hope?" But as President Taft said, the difficulty is that the people have (or rather use) "no machinery" other than the partisan irresponsible newspaper and the biased appeal of the orator, for determining how they shall act. The schoolhouse as a center of civic discussion offers such a "machinery" as is needed to develop intelligent public opinion. "It is no exaggeration to say," says Henry Campbell, "that in making the schoolhouse the forum of the people lies the chief hope of perpetuating the republic and perfecting its institutions." The legislature of Wisconsin has recognized this fundamental civic use of the schoolhouse as a center of democracy, as a right of so great importance, that the school boards are required to make provision for this use. And this great function of the schoolhouse as a foothold of democracy, a handhold upon government, a working-center of citizenship cannot be met by the school as an education place simply for the child.

Second only to the need of developing the citizens' capacity for intelligent government, in the great enterprise of America's making good, is the development of a strength-building recreational life, "the capacity to have fun without doing wrong."

Francis H. McLean, after a year's careful investigation of the community needs in many parts of America, placed as first in importance the need of wholesome recreation. Does the public school simply as the education center for the child tend powerfully toward the supplanting of vice and dissipation by constructive recreation and toward the free devotion of surplus energy to beautiful expression?

The public school as simply the education center for the child does not and cannot meet this need, because in its nature it is restrictive. The child in the school is not free to do wrong. The attendance is compulsory. There is little or no training in spontaneous play expression.

On the other hand, the opening of the school building as a center of

entertainment to which one is free to come or not as he will, the fostering there of the individual's free self-realization in recreational activities, in musical and dramatic expression, does directly and powerfully meet this need.

In the city of Milwaukee, up to a few years ago, Schlitz Beer Garden on Vliet Street was a popular and much frequented resort. Today if you go there, and, entering the old beer hall, go up to the bar, put your foot on the rail, and ask for something, you will receive a book from the branch public library. Why the change? Simply because the city has begun to furnish music in the parks. Formerly when a man would take his family to hear good music, he went to the beer-garden. He paid the wet tax, not because he wanted the liquor, but because he wanted the music—and that was the price. When music was furnished free in the public park, he went there. The beer-garden ceased to be profitable and was sold at a low figure to the city.

The time of greatest need for recreation opportunities is the time of greatest leisure, the evening. When every schoolhouse is equipped with gymnasium and baths, with bowling alley and games, with music and other forms of entertainment for the evening, the property of the evening dissipation places will be "for sale cheap." And when, as in Richmond, Ind., the community provides the services of a musical director, and as has been begun in New York City, the services of a dramatic director, to develop in the school buildings the latent orchestral, choral, and dramatic resources of the communities, the level of leisure activities, the recreational taste, and the moral character of America will be raised.

There is a phase of this service of the schoolhouse as a recreation center which has a fundamental bearing upon the most vital problem of the future of the family in America. Here is possible the acquaintance, under wholesome environment, of the young men and women who will be the fathers and mothers of the next generation. Today there is for very many no such recreation place which is at once free, attractive, and wholesome.

This common need of elevating the recreational life of the community, the schoolhouse as a center only for the education of the child, does not and cannot meet.

And finally, does or can the public school, used simply as an education center for children, develop that social consciousness, that breadth of human sympathy, that sense of solidarity and power of collective action upon which all those who do not accept the doctrine of "the class struggle" base their hope of human progress?

The public school is a socially supported institution, and yet as a children's education place it is individualistic in the tendency of its training. The main lines of conscious influence, obligation, and responsibility do not run horizontally from child to child, but perpendicularly from the teacher to each child. This is necessarily the case. So long as children are under a

teacher, and, of course, so long as children are children they must in school be under a teacher, the chief feelings of interest and loyalty will be directed upward toward the teacher, rather than outward as social feelings. Moreover, the whole development of child study is the consideration of the child as an individual, and the main tendency of its training is to develop the child's capacities and powers as an individual.

The individualistic training is vitally important, but it is also vitally important that there should be training in, or at least an opportunity for, the development of the community spirit, the social consciousness. The community building used only as an education place for the child is a paternal training-place. Used as a gathering-place for adults for self-education through discussion, recreation together, and acquaintance, it is a fraternal training-place. Both are necessary; each supplements the other, and neither can take the place of the other.

The possibilities in the development of the social consciousness and the power of united action, for whose unfoldment the use of the schoolhouse as a social center makes way, were suggested by Governor Wilson in these words:

> It seems to me that what is going to be produced by this movement—not all at once, by slow and tedious stages, no doubt, but nevertheless very certainly in the end—is, in the first place, a release of common forces now undiscovered, now somewhere banked up, now somewhere unavailable, the removal of barriers to the common understanding, the opening of mind to mind, the clarification of the air and the release in that clarified air of forces that can live in it, and just so certainly as you release those forces you make easier the fundamental problem of modern society, which is the problem of accommodating the various interests in modern society to one another.

The school as a center for the education of the child tends to unfold individual capacity; it does not and cannot awake the dormant social possibilities of a concerted life.

The movement to make the schoolhouse the civic and social center of the community, is, however, not by any means merely the result of the observation on the part of the educator, that the present service of the school is inadequate as a training-place for democracy, for better use of leisure, and for social consciousness; and the decision, following that observation, that the schoolhouse shall become the civic and social center. To be sure this is an important factor, and the welcoming of this movement by school men will help to hasten its realization. But the fact is that the movement to make the schoolhouse the focal center of the community has itself the character of the institution which it aims to develop. That is to say, the social center movement is a focalizing of many movements whose aim is the public welfare.

Men and women form local or national organizations to promote the public welfare along various lines. They work away at their special problems for a while. Then they make the discovery that, with communities as with individuals, that which is really beneficial is not what is done

for one, but what one does for himself, and that the wider use of the schoolhouse offers the convenient, economical means whereby the community can secure for itself the improvements in which they are interested, or by this means the community can protect itself against the evils they are fighting. So the members of one of these organizations start to agitate for the opening of the schoolhouse, and when they do they usually find that other associations working on other lines of public service have made the same discovery.

The fact that eleven different organizations, of various sorts, united to secure the opening of the schoolhouses in Rochester, N.Y., is an illustration of this gathering of forces into a common movement. This is typical of this movement thruout the country. It is a focusing of the efforts of various organizations which aim to promote the public welfare.

For instance, in nearly every community there is a group of men in whom the spirit of revolt against corruption becomes aggressive. When evidences of "graft" appear the first impulse is to catch somebody and put him in jail, and for a time that seems the final remedy. After a while, however, the men who are engaged in this pursuit begin to dig down to find the cause of the condition, and Mr. A. Leo Weil, the prosecutor of the recent graft cases in Pittsburgh, sums up his study of the whole subject by saying that "the indictment of grafters is the indictment of the community." Then he points out the cause in the condition since we left the use of the schoolhouse as a center of civic expression. "With the *increase* of official business there has come to the individual a *decrease* in the opportunity to participate either by the expression of his will or of his opinion, notwithstanding the greater necessity for such expression." So in Buffalo, William Wright, who in that city and in the state legislature for years has fought the corrupting influences of special interests, turns to the schoolhouse for the remedy: "The men who have special interests get together to look out for their special interests. Only as the citizens get together and organize to look out for their interests will the public welfare be steadily protected."

Wherever "reform" movements reach the constructive stage, they tend to become factors in the movement to make the schoolhouse the civic and social center of the community, for their leaders recognize that this is the means of securing that civic health thru civic exercise which will fortify the body politic against disease. Judge Lindsey says: "We have been fighting the beast; you [social center promoters] will make the dirty animal impossible."

Not only the fighters against political evils, but those who are interested in various specific measures of improvement, are turning to the idea of the establishment of the use of the schoolhouse as a citizenship organization center and civic forum. Whether the improvement projected be the adoption of another form of government for the city, the approval of a city plan, the matter of a bond issue, or some other special measure, the men

who seek to wake their communities to take some action of civic improvement are coming to recognize the benefit and the saving of energy that would come if there were the opportunity to present the proposed measure for discussion in established community civic forums; and these men combine their request with that of the "reformers" to open the schoolhouses.

The uniting of the religious and moral leaders of the community in urging the opening of the schoolhouses for clean evening recreation has been spoken of. In one city, during the past year, a leading clergyman said:

> Some time ago, when I began to recognize the need of a recreation place, especially for the young people, I thought of building a parish house in connection with my church. I then thought that it would be more economical to unite forces with others in the building of a Y.M.C.A. Today I see that the money that a Y.M.C.A. plant would cost would go very much farther and benefit a hundred fold more people if it were devoted to the equipment, supervision, and opening of the schoolhouses for physical training, club work, and entertainment.

The Playground and Recreation Association of America began with chief emphasis upon out-of-door recreation facilities, but it is now actively promoting the opening of the schoolhouses for wider use. Dr. Luther H. Gulick, the first president of that association, has showed his perception of the fundamental significance and need of the social center in these words:

> Only upon a basis of personal understanding and mutual confidence is efficient and coherent social action possible. This is the foundation of democracy. Communities must have, therefore, material and social machinery by which various classes shall come to know each other; some instrument that shall cross-section racial, financial, and social strata; something that shall go beneath these and touch fundamental human interests. . . . . The machinery most natural, as well as most available, is the public-school system.

But not only do these and other organizations which are formed to promote general civic, moral, and recreational improvement unite in indorsing and advocating the opening of the schoolhouse as a community center. There is also the active indorsement of those who are engaged in various specific forms of public service. In nearly every city and town the public library stands ready to co-operate by making the schoolhouse a neighborhood branch library. This is now being done in Grand Rapids and other towns. The co-operation of the Richmond Art Association is back of the movement to make the schoolhouses of that city neighborhood art galleries. The movement to make the schoolhouse a community music center has back of it the interest of such men as Walter Damrosch. The National Board of Censorship of Motion Picture Films is promoting the idea of making the schoolhouse the neighborhood motion picture theater. In some cases organizations co-operate in maintaining special extensions of the use of schoolhouses. For instance, the Rochester Dental Society maintained the service of the first dental office to be opened in a schoolhouse in that city. Of course the societies formed to promote the public welfare in rural communities are practically all in agreement with the recommendation of the country life commission looking toward community center development in the country.

But the social center movement has its roots deeper than the recognition of its need on the part of students of public problems in America. It is the expression of the great fact that the tide has turned. The dominant force of this century is not centrifugal but centripetal. We have passed the time of social analysis and are entered upon the time of social synthesis. As Dr. Elmer E. Brown puts it: "The very forces that have been drawing us apart into groups and classes have been making us sick of artificial separations." Little Jack Horner is growing up, and he no longer regards it as praiseworthy to pull a plum from a pie while he occupies a seat in the corner. For fifty years we have devoted our best energy to the construction of a fabric of machinery by which things would work together for good. We are now turning to the development of machinery by which folks may work together, and think together, and enjoy together for good. And the social center movement is assuming the force of a practical American common-sense idea generally held.

There is not space to deal at length with the question of administration. The National Education Association included in its resolution indorsing the social center movement the statement that the administration should be kept in the hands of the constituted school authorities. Obviously, this points the necessity of the school board or trustees having a comprehension of the values in the use of the schoolhouse as a center of democracy, a center of recreation, a center of neighborhood, as well as an education center for children.

The cost to a city of having a school board which does not recognize it as a duty to allow and encourage the largest possible community use of the schoolhouses is illustrated by the experience of Chicago. Twenty years ago, the Chicago School Board refused requests to allow the schoolhouses to be used for evening club activities and recreation. The movement to make provision for community social and recreational needs was then turned to the building of special community buildings to meet these needs. Since that time, Chicago has spent nearly twenty million dollars in securing these duplicate plants. Had this amount of money been devoted to increasing the equipment and developing the use of the existing community buildings and grounds, instead of having seventeen of these recreation centers, the city of Chicago would have an adequate community center developed in each district in the city, and its school system would be a model.

But today the average school board would not take such a stand. On the contrary, there are many school boards whose members recognize the possibilities and benefits of social center development. For instance, Mr. Joseph Scott spoke not only as one of the counsel in the McNamara case, but also as president of the Los Angeles school board, when in an address before the Southern California Teachers' Association, just after the confession, he pointed out that the problem of industrial control is the problem of this century, than which there is only one greater; and this greater

problem is, whether in the solution of the economic question we shall preserve our civic unity and our common-sense of justice and good-will, our fundamental human friendliness, and, said he, the possibility for the right solution of this greater problem lies chiefly in the use of this community institution—the school.

It may be said that the responsibility for promoting social center development lies back of the school board, that this body as a rule has no funds for this extension. In view of the fact that the school board is, in most cases, free to make out its own budget, it has within its hands the power of correcting this lack, and as a rule is able to make a beginning with funds in hand.

The first step is, of course, the engagement of a man as an assistant to the superintendent, to take charge of this field of the wider use of the school plant. The average superintendent has his hands full with the regular work of the school. This office is that of a social engineer. The man who occupies this position should, in the first place, be familiar with the beginnings that have been made in social center development thruout the country. He should grasp, of course, the idea of the use of the schoolhouse as a center for community organization of citizens, for this organization is the democratic foundation of the social center. He should recognize that he and his assistants in the various neighborhoods are not teachers, but servants of these neighborhood civic clubs, aiding in the preparation of programs, the work of publicity, and otherwise serving the owners of the buildings. He should be familiar with the methods found successful in the use of the schoolhouse as a lecture center, as this has been developed in New York and other cities. He should know the experience of Los Angeles, Worcester, and the other towns which use the schoolhouses as polling-places. He should be familiar with the use of the schoolhouse as an art gallery and music center as it has begun in Richmond, Ind. He should know the use of the library as it is in Grand Rapids, and should grasp the possibility of making the librarian's desk the local employment office and information bureau as this was begun in Rochester. He should be familiar with the school museum system of St. Louis. He should know the methods of boys' and girls' club organization worked out, for instance, in New York. He should be familiar with the gymnasium equipment and methods of direction which have been found satisfactory in Cincinnati, and he should know the various methods in the recreational use of the schoolhouse as these have been developed in New York, Chicago, Columbus, and other cities.

But the man who is qualified for this position must recognize that the beginnings that have been made are only fragmentary and that the opportunity in this field is for constructive pioneering.

The training for this position should, of course, include an understanding of the technique of the school in its present use, so that there may be a correlation between the day and evening use of the community building.

He should, of course, also have a thoro practical grounding in sociology But while the work of a social engineer is like that of a mechanical engineer, or a civil engineer, in requiring technical knowledge for efficiency, unlike these, it chiefly demands qualities of personality.

Obviously, the first requirement of the head of a staff of social center secretaries, boys' and girls' club directors, gymnasium directors, librarians, musical and dramatic directors is the capacity for organization and selection.

Some materials are conductors of electric currents and some are non-conductors. Some men are conductors and some non-conductors of social currents. A social engineer is a human being serving other human beings as a "social missing link." He must not only be common in his sympathies and understanding, free from all pettiness and bias; he must also be a "conductor."

But above all he must have the consciousness, and be able to inspire in his fellow public servants in this work the idea of *social service*, not at all in the usual sense of these words, but in the frank recognition that he and they are the hired men and hired women of the people who pay their salaries.

And finally, he must have a grasp of the social center idea in its big significance, that deep significance which was suggested by the banker quoted at the beginning of this paper, in the words, "This is going to make the neighborhood seem like home."

For this is the fundamental significance of the social center movement.

The education of the child is a family function. The man and woman began to be human when they got together for the education of the child. It was thru their association together upon the common ground, and under the common roof of the child's education that they learned co-operation, mutual consideration, affection. It was thru their association together upon this common ground under the common roof, consecrated to the education of the child, that they learned to think in terms of each other's welfare, that they developed the home feeling within the little unit group of the family.

Now, out from the household have gone the industries and the arts, out into the street and shop and store. And out in that realm the rule is *caveat emptor* and suspicion, and selfishness. We have not learned to think in terms of the larger group. But out there in the public school is that claim-stake of our faith that the larger group of the neighborhood has in it the potential quality of a household. Out there is the education of the child. As we get together under that common roof, upon that common ground consecrated to the education of the child which made us human in the smaller group, we shall develop, thru association and acquaintance, the household sense of common interest, of mutual consideration within this larger group, which will make the neighborhood, even in the city, seem like home, not only to the old folks who remember how we used to do, but to all of us.

Only as the social center movement is organized and developed in a spirit true to the democracy, the freedom, the all-inclusive good-will and tradition of the "way we used to get together back home," will this development fulfill its promise and be worthy its place as the characteristic institution of America, an efficient means for fundamental human progress.

THE BOOKMAN IN HIS RELATION TO THE TEXTBOOK PROBLEM

FRANK A. FITZPATRICK, MANAGER, AMERICAN BOOK COMPANY, BOSTON, MASS.

The textbook publisher in this country is of comparatively recent origin. He came into existence when schools began to demand that every pupil in the same class should use similar textbooks. Dealers in school furniture, heating, ventilating appliances, and school supplies developed as industries somewhat later. Seventy-five years ago in New England, outside of a few cities, schools were greatly hampered by their inability to require and procure uniform textbooks. As the West developed, settlers brought with them their old schoolbooks, and trouble and confusion resulted therefrom in the schools. The practice of giving an exchange price for old books was a concession on the part of publishers to aid the school authorities in getting out of the hands of pupils the diverse textbooks in the schools, which, remaining in the community, made classification impossible. The entire volume of the textbook business of every grade and description in the United States and its dependencies is under rather than over twelve million dollars per annum, divided among more than one hundred publishers. Briefly stated, the cost of textbooks of all kinds in any town or city never exceeds fifteen cents per capita of the population in such community.

Publishers advertise their new and forthcoming books in educational journals, in circulars, by mailing books free as samples to thoughtful and able teachers, that school authorities may know these books and ascertain for themselves the merits of the plans therein presented. When some publishers have sought to limit this advertising expense by cutting their number of donated sample copies, they have been so deluged with letters from teachers and school officials threatening them with loss of future business, that this expensive advertising practice still continues. Yet these agencies are feeble in comparison with personal presentation of the merits of a textbook by a skilled and tactful bookman.

A textbook first appears in the method of treatment of some excellent teacher in the schoolroom—friends, visitors see its merits and get in that way some of the ideas. The next step is to ask for all phases of the treatment, i.e., have the teacher write out a copy of his presentation. This finally becomes a serious task and the author works out his plan in detail and presents his manuscript to some publisher. It is criticized by editors,

referred to other critics, its adaptability considered—and accepted. His manuscript may be rejected; neither editor nor readers may get the idea or thought of the author; because the author's ideas run counter to the views of those who read the manuscript; because the manuscript is believed to be so contrary to prevailing usage in the schools that the sales would be small. In the beginning, authors and founders of publishing houses were both printers and salesmen. When Professor Davies, of West Point, wrote his series of arithmetics he found a publisher in a young man, the founder of a great business, who took the risk of printing, and personally canvassed teachers and boards of education. As business increased, it became necessary to delegate the sale of textbooks to other hands than those who wrote, published, or printed them. To market a new idea, or article, salesmen of a special character are needed. They must be able to demonstrate the value of this article. To sell a new type of locomotive, its merits must first be explained to officials; its advantages must be pointed out to engineers who will have charge of it; future orders depend upon the way the new engine stands the tests made by the railway people.

The general introduction of music in the schools is largely owing to the personal efforts and demonstrations, years ago, of two bookmen, who, against great indifference on the part of school officials and more skepticism, in frequent contests with each other and others, proved that music could be taught just as other subjects. Similar services have been rendered to the schools in their time by many other bookmen. At present, any new idea affecting the schools, their well-being, such as results from better heating, lighting, ventilating, must be virtually taught and demonstrated to school officials and authorities by the representatives of such industries, much the same as other topics are taught in the schools and in the world. The commercial world thus becomes an important factor in bringing about better conditions. In a recent article Professor Duncan quotes a famous chemist, Professor Bernhard of Paris:

> Former discoveries of mine I gave to the world and they have practically died. The last one I have patented because only by making it an object to some commercial interest to make it, can it be brought to man's attention and the world benefited.

An article that anybody can make, a book not protected by copyright, is not likely to be made by anyone. Any publishers can publish the great debates between Lincoln and Douglas. The copyrights on numerous books of great literary value have long since expired, but if you want to purchase a copy, the only place that one can be found is probably in the stock of the dealer in second-hand books.

The bookman, in his first relation to the schools, exists, directly, to point out and exploit the aims and methods of the author of the textbook that he is trying to sell; indirectly, to help the schools thru betterment of methods of teaching. For these purposes he needs opportunity to lay his facts and points before teachers and superintendents; otherwise, it might

be months and years before these busy people would discover what this author has to tell them. The cost of textbooks of all description does not exceed 3 per cent of the appropriation for running expenses of the schools. Yet to the pupils in the schools it may be a question of 50 per cent of their time and opportunities, to have this problem thoroly studied and solved, to the end that the tools used by them shall be of the best quality and latest pattern. Therefore, teachers and superintendents must and do take all the time that they can spare from their other duties to acquaint themselves with the contents, methods, and aims of textbooks.

The bookman, coming into contact with the schools at various points, is quick to find excellent teachers, teachers with inventive minds, and to encourage them to express their powers in the line of authorship. Thru the bookman a very large number of the best textbooks come to be written and published. He is, therefore, an important factor in the growth and maintenance of good teaching and the consequent uplift in the schools, even tho the immediate results of his work are not so visible as those resulting from the efforts of others. Another function of the bookman is to secure and insure a high quality of workmanship in the manufacture of textbooks. He is an important factor in this because he witnesses in the wear and tear of books in the schools shortcomings in binding and printing, and learns of defects in methods of treatment from the criticisms of teachers and patrons. These faults he is more anxious to correct than anyone else. This causes him to be alert at all times in the interest of his customers—the schools.

Bookmen are not interested particularly in any one system or plan of adopting textbooks. They are in favor, as a rule, of the existing plan in their respective fields. They cannot see, however, why teachers and superintendents with their interest in the well-being of the children in the schools can fail to oppose the form of state adoption; for under this plan the influence of the teacher, principal, or superintendent is practically destroyed. Where the town or city is the unit of adoption the trend is more and more to place the decision of textbook questions in the hands of teachers and their responsible superior officers. In my opinion, "Massachusetts is in advance of any other state in its solution of the problems involved in a representative government." The textbook law in Massachusetts, on the statute books over forty years, is as follows: "Changes may be made in the textbooks used in a town at any time, notice having been given at a previous meeting and two-thirds of the members of the Board voting in the affirmative"—simple, compact, progressively conservative, affording opportunity for changes, requiring careful consideration. Last year the legislature passed an act requiring the superintendent of schools to make his recommendation of textbooks to the Board of Education, as a prerequisite to action on the part of the Board of Education. The bookman always welcomes the trend of the question of selection of textbooks to the skilled

teacher modified by the judgment of principals and superintendent. By that method he escapes the influence of the politician, of the relative of some board-member's wife, of the enthusiasm for a rival's wares because someone belongs to the same college fraternity, or went to the same preparatory school.

Strange as it may seem to some, publishers of textbooks and their employees, the bookmen, are leaders in the development of better methods and higher ideals in the conduct of business. Yet this paper would be incomplete without some discussion of the faults and misdemeanors of some few members of the profession. The bonus system—postdating of bills, extra discounts, cutting of prices when times are dull, etc.—is a common practice in many lines of trade. Banks are still soliciting depositors' accounts by promising interest on monthly balances. Dealers in pianos, automobiles, certain kinds of new machinery, continue the practice of paying commissions directly and indirectly for new business. Publishers of magazines offer premiums in various forms to new subscribers. It is an axiom in the business world that a business cannot be developed on any other basis than that of absolute and unswerving honesty. But there is always a small percentage of business men who are not built right actually always to do what they believe is right. A salesman knows that if he misrepresents an article, hides defects in it, exacts too high a price for it, overstocks his customer by an inordinately large order, that the doing of any one of these acts will react upon himself and work an injury to him and his future prospects. Yet some salesmen, who have not been consciously disciplined by experience, will still take a chance. Man's moral fiber has not yet been sufficiently strengthened in his struggle upward, always to withstand temptation. The ability to put aside an apparent immediate benefit, even when one's intellect tells him that in the long run such decision is right, is an attribute not universally possessed. Happily for most of us, life is not a tragedy but a comedy. The conflicts in the sphere of duty which constitute tragedy, in a comedy, are always modified by happenings which mediate these conflicts. It is like a bad dream which, enmeshing us in its horrible chain of circumstances, is suddenly ended by an awakening. We are told by the moralists that this course is right and that is wrong—why hesitate a moment over your decision? In actual life, however, such a clear proposition is seldom presented—usually there is always some wrong mixed in with the right and some right with the wrong—and one's decision in such cases is not so easy as the professional moralist would have us believe.

Now, the oftener a man is required to act, exercise his judgment and the number of different planes in which these actions lie, bear a relation to the number of errors he will make. As bookmen need to act on inferences oftener and on more fields than teachers or principals, they ought certainly to make more mistakes. When such error or mistake in judgment is com-

mitted by a bookman who has a quasi-public position in his world, it is likely to have much more publicity than similar shortcomings on the part of other business people. The author, the editor, sees his mistakes in black and white, but the errors of teachers, superintendents, managers of businesses, bookmen are not so definitely chronicled. Yet some bookmen have been guilty, in prosecuting their business, of errors, faulty judgments, and indiscretions. Teachers, principals, college professors, ministers too, have erred in our time to such an extent as to bring some few individuals within the meshes of the law. But you cannot successfully indict a whole people, nor a whole class, nor a whole profession because some individual member has erred. On the whole, bookmen, in their methods, their line of action, their life in and out of their business, challenge comparison with any other class of business men.

For this present purpose I assume that teachers may group our errors under four heads:

1. Discrimination in terms—giving to one place better rates than to another in order to secure business, some phase of the bonus system, etc.
2. Undue activity in the politics of the National Education Association and state teachers' associations.
3. Meddling in the affairs of the school—assisting teachers and superintendents to secure places; the use of political influence in or outside the schools.
4. Personal criticism of competitors for imagined business gain.

First. In over twenty-five years' experience in the business I have known and been informed directly and indirectly of not more than twelve instances of irregular practice on the part of bookmen. The motive in each case was intense personal feeling against some rival bookman and the desire to win at all hazards. Of course such actions are reprehensible and should be frowned on by everyone inside and outside the business. If this is true, it will be asked why does the publisher not promptly discharge the offending bookman and publicly disown the wrong act? For the same reason that in the family we do not publicly disown one of its members; for the same reason that a superintendent of schools does not recommend the discharge of a teacher who does some stupid thing or gets tangled in the maze of questionable action. Again, the spirit of the age no longer permits the penalizing of employees for errors or faults which can be eliminated thru wise counsel of superiors.

Second. Undue activity at meetings of state teachers' associations or at the National Education Association. If bookmen are members of said association, or associations, they have as much right as other members to express their convictions on matters relative to the policy of the association. As a matter of fact, bookmen rarely take any interest in either the program or the politics of such associations. They never do unless solicited by superintendents or teachers. In such cases the votes and support of bookmen are as various and diverse as the votes and action of any other class of voters. Publishers themselves have no interest in such matters.

Third. Meddling in local politics or use of political influence. In communities where such influences control school affairs, such as the election of a superintendent, the appointment of teachers, the selection of janitors, the choosing of school sites, the erection of buildings, etc., it can hardly be denied that they may also affect the adoption of textbooks. Here are conditions into which the bookman is thrown, and for which he is in no way responsible. A man of ability and character, who has worked long in a limited field, has acquired an extensive acquaintance; he comes in personal contact with leading people in the various parts of his territory. He must be politic and tactful, as well as energetic in the prosecution of his business. Under such conditions he may be tempted to use the local political forces; the high-grade bookman never does, because of the ultimate danger to his business from such an alliance: because such aid becomes a burden on him and his business. No one regrets more than do the publishers and the bookmen interference in educational matters thru politics or politicians. But I know of no ground which justifies any general accusation against the bookmen of resorting to politics in the prosecution of their business. Probably such charges in nearly all instances originate in the attempt of an unsuccessful rival to account for his failure. Superintendents in search of competent teachers for an immediate vacancy seek the advice of bookmen at times because of their large acquaintance. If a bookman commends some worthy teacher, in response, isn't it ungenerous to intimate that he has other motives than serving the schools and a worthy teacher? Personally nothing gives me greater pleasure than to serve an excellent teacher or superintendent, because I feel that by so doing I am helping the schools—no one ever suggested to me that I had an ulterior business motive in such action. In my own case I am as careful in recommending teachers as I was when superintendent.

Fourth. Personal criticism of competitors for imagined business gain. The evil of "knocking" one another, in the slang of the day, is more or less prevalent in every line where there is intense competition. It occurs in the professions and thruout the commercial world. Echoes of such misrepresentation are heard from small people in college faculties. The business of publishing school books and selling them ought to be above and beyond this sort of thing. It is with great regret that I admit that this is not always the case. We are too prone to gossip and to criticize others, to the loss of our own dignity and the consequent impairment of our business. This practice, however, brings its own punishment. The lawyer who indulges in personal insinuations or reflections upon his opponent fails to rise very high in his profession. The doctor of medicine who is prone to point out the weaknesses or incapacity of his rivals loses caste. The practice comes from a low view of business ethics by the publisher, and from a futile tendency to magnify himself, which is sometimes a by-product of acute business rivalry. There can be no question that such

habit is very objectionable, contrary to sound business principles, and should be frowned upon by all right-thinking people. Bookmen are, in effect, the attorneys of their respective houses; though cordial in their treatment of each other, when not engaged in contests, the intense personal antagonism between rival bookmen in heated and long-continued rivalries sometimes presents a demoralizing picture when viewed by a spectator who is not conversant with conditions. Rival real estate agents buying a particularly coveted property, newspaper reporters on track of an important news item, all men engaged in a fiercely competitive business go thru similar experiences. That the large majority of bookmen waging war against each other, living their lives in a small territory, nearly always in the limelight, can carry on their business efficiently and successfully and continue to receive the respect, the confidence, the friendship of practically every high-class man or woman with whom they come in contact in the schools, is a high tribute to the integrity, honor, and character of the profession.

When suitable opportunity to meet teachers and superintendents is given bookmen, only good can come from their visits. It is a maxim among bookmen that the busiest, ablest, and most prominent school officials and teachers are always the easiest to see. It is so rare when a bookman is denied an interview or prevented from prosecuting his missionary work that such occasions are a negligible quantity. An insistent, ill-mannered individual may, it is true, place himself outside the pale of even the great courtesy of the school world. Of course there are some narrow-minded, self-centered, all-knowing school officials who look upon the bookman as an unnecessary evil. Such men are rare; such attitude being reflected in their school activities elsewhere usually brings about a proper point of view. Trade, commerce, and science are interwoven together. Nothing is more anomalous, illogical, and unjust than antagonism between publishers, bookmen, and teachers. There should be complete sympathy and understanding between them. The bookman should express this policy in his actions at all times. Courteous, respectful but not apologetic, anxious to perform his principal duty as salesman, reasonably jealous of the ethics and responsibilities of his profession, but conscious that he is a factor in the cause of education.

To my mind, therefore, the bookman belongs properly in the system of education. He has a necessary function to perform. He will perform that function until other parts of the system develop so that the work performed by him can be better performed by them. Then, in accordance with the law of progress, he will pass away. Until that time it is to be hoped that he will live his life with the agencies for good in the schools and do his part toward reducing the number of his shortcomings, that thereby the efficiency and well-being of the schools may be increased.

THE EFFECT ON EDUCATION AND MORALS OF THE MOVING-PICTURE SHOWS

JOSEPH R. FULK, SUPERINTENDENT OF SCHOOLS, SEWARD, NEBR.

The moving picture has developed a form of public entertainment that has within the last few years spread itself over the entire civilized world. It seems that at last a universal means of communication has sprung into popular use everywhere.

The still picture has in all times exerted great influence with cultured and literate humanity. The magic lantern and its modifications enlarged very much the influence of the still picture, but language, written or spoken, was required to give to it anything like complete meaning. The moving or living picture is universal. It carries much meaning without language. Interpretation of action is an instinctive tendency.

This paper is part of a general study of the moving-picture show. Altho the topic limits the discussion to the effect of these shows on education and morals, some of the facts concerning the development, financial aspects, and control of the business are given to point out the magnitude of the new problem.

In their report for the year ending December 31, 1911, the Bureau of Moving Pictures of the City of Chicago gives the following figures:

Total number of films approved.....3,255
Total length of films approved.....2,604,000 ft.
Total number of 5c and 10c theaters that exhibit moving pictures...400

Here are five hundred miles of original films released in one city in one year. During the same period the censors of the bureau rejected thirteen miles of films.

At present there are at least thirteen thousand moving-picture theaters in the United States. The increase is about one thousand annually. Conservative authorities place the daily attendance at five million. The attendance at the fourteen hundred regular theaters is about seven hundred and fifty thousand a day.

The film-manufacturing business has grown to enormous proportions. The great film companies employ studio "stock" players, and send groups of actors to all parts of the world to secure films with natural and historical settings. Films are made depicting life, industries, and scenery in many parts of the earth. The business has its trade journals, film bulletins, magazines, and state and national exhibitors' associations. Within the last year several schools have been opened for the purpose of teaching how to write scenarios or motion-picture plots.

These facts indicate that this new form of public entertainment is neither a fleeting fad nor a mental epidemic, but is a sociological force that must be reckoned with.

There is great truth in this assertion of Maeterlinck: "It is the way in which our hours of freedom are spent that determines, as much as war or as labor, the moral worth of a nation." The American people spend about one-fourth as much time in moving-picture shows as is spent in the public schools by children from fifteen to eighteen years of age. Authorities estimate that at least 25 per cent of those who attend are children. A careful investigation of the attendance in thirty-six towns and cities of Nebraska shows that 35 per cent of those attending are children under fifteen years of age. Children and adults of all classes sit side by side in the dim light of the motion-picture theater. The public school and the moving-picture show seem to be the only truly democratic institutions in the United States.

The control of the output of films is by far the greatest factor in the motion-picture problem. The Board of Censorship of New York City was formed in 1909, and was recognized by the film manufacturers as national in 1910. The report of the National Board issued in May, 1911, asserts that more than 99 per cent of all pictures publicly exhibited in the United States are censored by the board, and that the board's verdict is carried out with approximate completeness in all parts of the country. Reports from various cities testify that the board has done much to place cleaner and better films on the market. The board has also aided in developing the educational possibilities of the motion picture. However, comparatively few educational films are produced. The 630 films released by the "Licensed" and "Independent" manufacturers during November and December, 1911, are listed in "Motography," a magazine whose purpose is exploiting the motion picture, as follows: dramas, 86 per cent; scenic, $6\frac{2}{3}$ per cent; current events, $2\frac{1}{2}$ per cent; educational, 5 per cent.

"Motography" for January, 1912, in reviewing the year 1911, says:

> The year has been marked by a general increase in the output of films, most of the licensed, and many of the independent, makers adding one or two reels to the weekly product. It is to be regretted, however, that a large portion of the new product has not been devoted to scientific, educational, and travel subjects.

Some of the film manufacturers have educational departments. In reply to an inquiry one of the large companies answered as follows:

> We have in course of preparation a Moving Picture Library of America, which will embrace trips treated in a comprehensive manner, covering all the states, and showing the principal attractions; points of interest in cities, and along railroads; rural and city developments; views of the largest industrial institutions with data pertaining thereto; historical scenes and topography of each state. It will be possible for a school to obtain a single film of one state or films of all the states.

In his catalog which he calls "An Educational System by Visualization," George Kleine of Chicago lists over one thousand films. This he claims includes all available films on educational topics. Many in this list, however, are very loosely called educational.

The Edison company will soon put on the market a moving-picture machine designed especially for school and home use. This machine, which is to sell for about fifty dollars, will use a special film costing about twelve dollars. This is about one-tenth of the cost of the ordinary trade film. These special films will be rented to schools at a reasonable rate.

A few schools, churches, and other organizations are now using the motion picture as an educational and moral help. These uses, however, are comparatively rare. At present, it is the motion picture in the public show that is yielding the influence.

The popular motion picture is essentially dramatic. In some respects it is a modern development of the pantomime. As a rule film manufacturers use educational material only when it contains a dramatic story in some form. The drama in its various forms has always played an important part in civilization. The moving-picture show has done for the drama what printing did for literature. It has brought a form of dramatic art into the daily life of the people. The photoplay holds and affects an audience in very much the same manner and degree as the regular drama. It may have fifty or one hundred scenes if needed; may follow a character from place to place, and may present scenes and circumstances that are not possible on the stage. But it has its limitations. When action is subordinated to an element of character the film is inadequate. What people are may be suggested only by what they do. The appeal is thru the eye, and is chiefly emotional. This omission of language and of the direct intellectual appeal weakens the motion-picture drama, and renders it less moral, because it stirs primitive passions and does not arouse highest mental activity.

Anyone who has observed moving-picture audiences when educational films have been thrown on the screen must be convinced that people do not go to these shows to be instructed. It is the dramatic short-story film that appeals to them. The films that give the thrills of the "yellow back" novel without effort or exertion are most popular. Indians, cowboys, domestic troubles, daring deeds, elopements, the love story, these are the common popular themes. There is much display of the sentimental. Many of the situations and experiences of life that are more or less sacred or private are shown again and again to audiences of both sexes and of all ages. The moving-picture show does not recognize the child and the adolescent. Special shows for children would remove many of the objectionable features. At present the question is not, "What shall my son or daughter read?" but, "What moving pictures shall my son or daughter *see?*" The sensational and emotional novel is *seen* these days, not read.

This constant playing upon the emotions of the child and adolescent tends to overexcite, and to dull the finer feelings, and to prevent the normal development of the emotional life. The overexcitement creates an ever-increasing desire for something that stirs and thrills. Whatever holds

attention determines action. This growing desire for emotional excitement is apt to lead children, and adolescents especially, away from right ideals and morality. Here lies the greatest moral danger of the motion-picture drama. The possibilities for evil due to the dim light of most of the moving-picture theaters add much to this danger.

The direct educational influence of the moving pictures in the public theaters is very difficult to measure. No one doubts that under proper supervision the motion picture can be made a valuable help in formal instruction. Certain phases of many school branches, such as historical events, industries, transportation, and customs of peoples, may be taught more effectively with their aid. But it seems to me that the educational value and possibilities of the motion picture have been unduly emphasized.

Attention to moving things is instinctive, and is not apt to be accompanied by real mental activity. If the moving objects are constantly changing in form and position there is continuous change of ideas. The mind cannot rest on any object of thought. The "stream of consciousness" becomes a torrent, in which things may be recognized, but not accounted for nor reasoned about. The film of the moving-picture show moves very rapidly. There is very little given in the way of explanation. The mind is hurried from one thing to another until the picture becomes little more than a fantasy or day-dream, unless it has a strong emotional appeal. If there is *impression*, there is no chance for *expression*. Posed educational films often misrepresent, and some films advertised as taken on the spot are evidently posed. All frequenters of moving-picture shows are acquainted with the New England buildings and background of the cowboy and western Indian films, and many have seen a lion hunt in Africa or a jungle scene posed in a film plant in Paris, New York, or Chicago. Travel and geographical films give about the same conception of a region as is obtained by viewing it from a railway train.

The headliners of the newspapers interpret the facts for the busy or mentally indolent readers. The cartoonists do much to mold public opinion. In London there are three daily papers which contain practically nothing but news pictures with short explanations. *The Animated Gazette* is a London film organization that furnishes a daily service of moving pictures of the news to a circuit of theaters having audiences of two million daily. Weekly current-event films are now used by many of the moving-picture shows of this country.

All of these organizations and forces tend to weaken thought power by furnishing to the people ready-made interpretations and conclusions. The same influence is being exerted in the field of literature by the photoplays based upon standard literary productions. The standardization of the interpretation of a poem like "Enoch Arden" robs the poem of its chief value, and takes from those who have not read it the joy of the reading. Such a poem cannot be seen except in the imagination of the reader. The

usual crudeness of the acting and the inadequacy of expression make the photoplay of such a poem a serious obstacle to real interpretation and appreciation.

It seems to me that under the most favorable circumstances the public motion-picture theater has very little educational value, and that these shows as now managed are often detrimental to education.

My investigation has led me to believe that on the whole the motion-picture shows are less harmful to education and morals in the large cities than in the small cities and towns.

This conclusion is based to a great extent upon an investigation carried on in Nebraska, and also on my own observation of the shows themselves. I sent a questionnaire on the motion-picture show to the superintendent or principal of the public schools of every city or town in Nebraska having a population of seven hundred or more. Reports are tabulated from 68 towns. Of the towns reporting, 20 have a population of less than one thousand each; 27 between one and two thousand each; and 11 between two and three thousand. The list includes one city with a population of ten thousand, and five between five and ten thousand each.

There are 95 moving-picture shows in operation in these 68 Nebraska towns. The average attendance in the 36 towns reporting that item is 40,000 per week. Thirty-five per cent of those attending are children under fifteen years of age. The previous business of the managers of 54 shows was reported. Among these, seventeen had been in the merchandise business; six loafers or no business; six farmers; five showmen; three billiards and pool; two barbers; two editors; two students. Eleven other callings were represented. Few especially fitted men were in charge of shows. The business is strictly commercialized.

Of the 64 towns answering the question: "Are shows open on Sundays?" 57 reported "No"; 7 "Yes." Sixty-one out of 65 reported no local control of pictures shown.

"Are there any local restrictions or ordinances regarding the attendance of children?" was answered in the negative by each of the 64 towns reporting. One town reported a movement to pass an ordinance refusing admission to children, after the first evening show, unless accompanied by parent or guardian.

Forty-one towns reported no local opposition to the shows; 11 some or very slight opposition; 12 organized opposition. The organized opposition was by churches, good-government clubs, and public schools.

In 40 towns all classes of people patronize the shows; 10 report attendance chiefly young people and laborers; 5 name the rowdy element as prominent.

Thirty-seven schools reported that the shows were harmful to school work; 6 helpful or not detrimental. The commonest causes of harm given were: "neglect of home study"; "diffused attention and dullness"; "wrong

ideas of literature, geography, and history"; "frivolity and desire for cheap entertainment"; "general tendency toward the coarse and low, the rude and disrespectful." The only helpful influence named was, "Creates interest in geography and history."

In answer to the question, "What is your opinion of the influence of these shows upon school children as regards character formation?" 38 replied "bad, detrimental, harmful, or no good," 10, "good, no bad effects," or "very little influence." Some of the causes of evil influences were: "Numerous love scenes foster too much familiarity among boys and girls"; "desire for excitement"; "at shows children mingle with all classes, hear indecent jokes, etc."; "take children away from home"; "the music never elevates"; "wrong impressions of life created"; "lessens capacity for earnest, persistent work"; "cultivates habits of careless spending"; "many pictures suggest evil to boys and girls." The good influences were not named.

Forty-seven reported the shows harmful to the physical welfare of school children; 8 no injurious physical effects noticed. "Injury to eyes," "bad ventilation," and "loss of sleep" were most often given as physical harm.

Thirty-eight reported that they considered the shows more harmful than beneficial to the community; 13 more beneficial. The chief harmful causes given were: "Deprave public taste"; "trivial waste of time"; "appeals to sensational side of life, and ruins better class of public entertainment"; "causes children to want to be entertained"; "engenders idleness." Some of the benefits named were: "wholesome amusement at low cost"; "much better than ordinary cheap shows"; "keeps young men from pool halls"; "comparatively harmless for a class that would spend money for dance or drink"; "supply considerable information."

In a few cases superintendents showed very little interest in the subject, and their replies indicated very slight knowledge of social conditions in their communities.

My general study of the motion-picture problem and the special study of conditions in Nebraska seem to justify these conclusions:

1. The moving-picture show has come to stay, and will increase in numbers and influence.

2. The character of the films shown and the general influence of the shows have improved much in the last three years.

3. There are important possibilities in the educational film, but the public motion-picture theater has very little, if any, educational value. The people want to be thrilled and amused, not instructed.

4. The moving-picture show yields a tremendous moral influence, that is not generally understood or considered. At present this influence is decidedly detrimental.

5. At present the public motion-picture theater is doing more harm than good, especially in the smaller towns.

THE STANDARDIZATION OF JANITOR SERVICE

G. M. WILSON, SUPERINTENDENT OF SCHOOLS, CONNERSVILLE, IND.

The physical basis of our school work is in charge of the janitor. We look to him for proper temperature, proper ventilation, proper humidity, and proper cleanliness. These matters are related very directly, not only to the health and happiness of the child, but to his progress in school work as well.

Dr. Putnam says:

> Methods of precision are as practicable and as necessary for caretakers of a school as for nurses in a hospital; their routine practice is entirely possible with reasonable instructions.

Janitor service being physical and manual would seem to lend itself readily to standardization. But my investigations show a general absence of standards and a resulting inefficiency and neglect. This is wrong, for compulsory education means compulsory contagion and disease unless physical conditions are kept right. No good homemaker has the dirty floors and foul air with which we shut up children and teachers.

The desire to improve the janitor service in my own system led me two years ago, under the inspiration of ex-Commissioner Brown, to attempt a study of janitor service. It became evident early in the study that there was little agreement as to definite standards. The facts gathered with reference to *cleaning* will illustrate the situation. Out of 40 manuals of rules and regulations examined, 24 made any reference to the duties of janitors. With a possible mention of and agreement on 288 points in connection with scrubbing, sweeping, dusting, and other simple points in cleaning, there was an actual mention of 58 points and a practical agreement on 13. Two of the 40 manuals indicated how the scrubbing was to be done. Two indicated how the woodwork was to be cleaned. Three indicated how the walls were to be cleaned, but the practice even among the three varied from cleaning the walls once in two months to once a year. Six of the 40 manuals indicated how often the windows were to be washed, but even among the six mentioning the point the frequency varied from one month to three months. Cities whose manuals of rules and regulations were examined were scattered thruout the following states: New York, New Jersey, Pennsylvania, Maryland, Ohio, Indiana, Illinois, Minnesota, Nebraska, Iowa, Montana, California, Texas, Louisiana, Georgia, and Kentucky. The cities are fairly representative of the country, but even among cities in close proximity there is no more likelihood of agreement than among these widely scattered cities. The following illustrative table (p. 463) shows the distribution on a few of the facts considered.

The study of rules and regulations was followed by sending out a questionnaire in July, 1910, in which the chief points covered were the following: How are the floors dressed? How often in halls, in rooms? Are floors

scrubbed or mopped, and how often in halls, in rooms, and in toilets? How is the sweeping done—with broom, with brush, with dust-down? How often is the sweeping done? And in like manner details as to cleaning the woodwork, dusting, washing windows, and caring for the blackboards were called for. Not all of the returns from this questionnaire were summarized, but a number were selected at random, which from all appearances were fairly representative. The cities selected were distributed thruout the following states: New York, Ohio, Indiana, Iowa, Kansas, Florida, and Illinois. In 17 cities selected at random, with the possible mention of and agreement on 476 points, there was an actual mention of 274 points and a practical agreement on 155 points, which is 56 per cent of the points mentioned or 32 per cent of the total points. The 32 per cent of agreement on total points is the significant figure, as omission in the questionnaire means the absence of any definite standard. The word "practical" in this study was inserted in order to get agreement where there was very little evidence

	Floors—How Dressed	How Often	How Scrubbed	How Often Rooms	How Often Toilets	How Often Swept	How Cleaned Woodwork	How Often	Cleaned Walls	Dusting	Often Cleaned Windows
Number mentioned out of 40	0	0	2	10	6	9	2	9	3	11	6
Largest practical agreement	..	..	2	6	4	8	2	3	2	9	2
Range of practice	..	..	"Mop"	Monthly to twice a year	Daily to yearly	Daily to twice a week	"Wash"	Monthly to twice a year	Two months to yearly	Daily to twice a week	1 month to 3 months

of agreement. For instance, woodwork cleaned from two to five times a year was considered as agreement. The real agreement is in having no definite standard. This is further illustrated by some of the details. Woodwork was cleaned variously from daily to once a year. The baseboards were dusted in some places daily, in other places yearly. The windows were washed in a few places weekly and other places less frequently to twice a year. The illustrative table (p. 464) shows the distribution on a few points studied in the questionnaire.

It seems reasonable to conclude from the study of rules and regulations and from the returns based upon the questionnaire that there are no well-established standards in the matter of schoolroom cleaning. The large number not reporting or reporting very indefinitely is stronger evidence of the absence of standards than the lack of agreement among those reporting. The two lines of investigation point to the same conclusion. Variations may be due to conditions, but under any conditions there should be a standard. Some of the sources of error in the foregoing investigations are: (1) The difficulty of getting at actual practice thru a manual of rules and

regulations. (2) The desire of superintendents to make a good showing in a questionnaire, especially when in doubt as to facts. (3) The difficulty of comparing situations that may vary as to important factors.

About two years ago Dr. Ayres studied a few of the facts with reference to schoolroom cleaning in 1,038 cities scattered thruout the United States. In his fine optimistic way Dr. Ayres notes the tendency toward better sanitary conditions and methods as applied to cleaning. Yet the other side of the situation shows that there were 395, or nearly 40 per cent, of the 1,038 cities where moist cloths were not used for dusting purposes. There were 144 cities, or over 10 per cent, not using dust-absorbing compounds for sweeping. The median frequency of the washing of schoolroom floors was $3\frac{1}{2}$ months, the variation being from one day to never (which doubtless means eternity). The median frequency of the washing of windows among the 1,038 cities was four months, the variation being from once a week to once a year, seven again reporting never. In order to test out to an extent

	Floors—How Dressed	Often Rooms	How Cleaned	Often Halls	Often Toilets	Often Swept	How Cleaned	How Often	Often Walls	How Dusting	Windows Often Washed
Number reporting out of 17....	11	8	10	11	10	15	14	14	12	14	13
Largest practical agreement.....	7	2	6	4	4	14	11	5	3	8	10
Range of difference (underscore prevalent).....	Oil	1 month to 5 years	Mop	Daily to yearly (monthly)	Daily to yearly (monthly)	Daily	Wash	Monthly to yearly (3 times a year)	2 to 5 years	Damp cloth	Weekly to 4 times a year

the statement made by Dr. Ayres that "these most encouraging signs of progress with respect to the cleansing of schoolrooms indicate that the day is not far distant when our schools shall be as clean as hospitals"; in order to learn to what extent we were approximating these conditions, I secured from Dr. Ayres, under promise of strict secrecy, the names of 50 cities where dust-absorbing compounds were not used in sweeping, and the names of 50 cities where moist cloths were not used in dusting. To these 100 cities letters were sent including a self-addressed postal, ready for reply after inserting the word "yes" or "no." This reduced the effort on the part of those responding to a minimum and insured a large measure of accuracy in the returns. The returns indicate that the optimism of Dr. Ayres is not without some foundation. Twenty per cent of those responding have in the last two years adopted the plan of using dust-absorbing compounds in sweeping, 80 per cent are persisting in their former insanitary methods. Thirty-six per cent of those responding indicate that they are now using moist cloths in dusting, while only 64 per cent persist in the use of former methods. Not

all responded. It is possible that those who could respond favorably responded a little more promptly and therefore a little more surely. The replies indicate that progress is being made slowly and that much remains to be done, for the smaller, less fortunate schools were not included in the inquiry.

The further study made recently thru the courtesy of the educational journals, in printing a questionnaire, does not add in any material way to the information as gathered in former studies. Window-washing, for instance, continues to vary from once a week to summer showers. Thruout it is noticed that it is with rare exception that any definite standards exist with regard to cleaning. While I do not know with any definiteness that the same conditions exist in other lines of janitor work, yet I will venture that many of you are ready to agree that the same conditions do exist and that there is a general absence of definite standards with regard to lighting, heating, ventilation, and practically all of the lines of janitorial service.

Now for a few minutes I desire to defend the thesis that it is possible to fix definite standards and thereby to increase greatly the efficiency of janitorial service. As regards ventilation, we know that each pupil is entitled to 200 cubic feet of air space with an inflow and exit of 30 cubic feet of air per minute. It is possible to measure and insist upon this standard of fresh air. We know that foul air is conducive to catarrhal and pulmonary diseases, and that contagion spreads under such conditions. We know, on the other hand, that fresh air is very closely related to a fresh mind, to progress and success.

In the matter of lighting we know that clear, clean glass should equal one-fourth the floor space, that the light should come from one side of the room only, that no light should come from the side of the room opposite the teacher's desk, that the width of the room should not exceed 30 feet from the left side, that chipped glass reduces the amount of light from 25 to 50 per cent, that the upper one-fourth of the window furnishes one-third of the light, etc. We know also, that this is directly related to cleaning, that dirty windows mean a reduction in light varying from 10 to 50 per cent. Knowing all of the foregoing, it seems possible to determine a definite standard for lighting and in any particular locality a definite standard for cleaning the windows. It is just as surely known that this will not be secured by a direction to wash the windows "when dirty" or "as often as needed."

As regards humidity, we know that enlarged tonsils, catarrhal diseases, generally nervous and anæmic conditions follow the failure to humidify the air properly. We have a definite standard fixing a lower limit as 60 per cent and the upper limit as a relative humidity of 70 per cent. We know the methods by which to secure the proper standard of humidity. So here again it would seem possible to fix and to carry out a definite standard.

With reference to the temperature of the schoolroom, we know that a

uniform temperature of 68 degrees means from 25 to 50 per cent less coughing and colds in the schoolroom than a temperature of 72 degrees. We know that excessive temperatures mean a weakened condition, rendering the child susceptible to disease and impeding progress in school work. We were told by the Science Department of this Association last year that the temperature should never under any circumstances be permitted to pass 70 degrees Fahrenheit, the lower limit being 66 degrees. In regard to temperature there is certainly one standard which can be fixed with confidence. And yet we find a wide variation from this standard and a prevalence of high temperatures.

The foregoing brief discussion calls attention to the fact that in addition to cleaning there is a possibility of definite standards of janitorial service in connection with ventilation, light, humidity, and temperature.

Now permit me to return to my own situation and to report what we have accomplished during the past two years in regard to schoolroom temperature and cleaning, and the means employed to secure the results.

The schoolroom temperature has been reduced from a variable ranging from 70 to 75 or 80 degrees to a close approximation to a constant at 68 degrees Fahrenheit. This has been accomplished thru special attention to the matter and requiring a report on alternate weeks showing the temperature at five chosen times thruout the day. The record is made by pupils in upper grades.

A janitor's schedule fixing standards and organizing the work at each building has been most effective in securing results in cleaning. The schedule varies slightly with different buildings. The janitor's schedule for our central building is given herewith.

JANITOR'S SCHEDULE

1. *Yard.*—Papers picked up daily, walks swept daily, morning. Ropes for may poles and swings put up before 8:00 A.M.

2. *Scrubbing.*—Scrub all toilet floors and urinals twice per week. Wash seats with warm water, gold dust, and coal oil—Wednesday and Saturday. Scrub gymnasium once per week—Monday A.M. Once every *six weeks* scrub halls and schoolroom floors—Monday.

3. *Woodwork.*—Once a week wash door knobs, hand rails, banisters with warm water, gold dust, and coal oil—Saturday. Once every *six weeks* wash other woodwork—Thursday.

4. *Walls.*—Brushed down every six weeks. Downstairs third week, upstairs sixth week.

5. *Sweeping.*—All schoolroom, hall, toilet, and basement floors swept *daily* with dust down and brush—evening.

6. *Dusting.*—Done with cloth dampened with water or coal oil. Desks, doors, window sills, and baseboards dusted *daily.* Pictures, doors, and window casings once a *week*—Friday evening.

7. *Blackboards* cleaned each Saturday and troughs swept out daily.

8. *Windows* washed inside and out *twice per month* with bon ami or alcohol.

This schedule secured decided improvement immediately. Any janitor who took an interest and pride in his building welcomed it. It set a standard and systematized his work.

It is not effective to require that the building be kept "in sanitary condition." Whether it is original sin or an acquired tendency, janitors, when left to do things "as needed" or "as often as necessary to insure sanitary conditions," show a decided preference toward toasting their shins in front of a furnace rather than cleaning windows, walls, woodwork, and floors—in halls, closets, and unoccupied rooms. They prefer to leave this work for the annual cleaning period on extra pay during vacation. As janitors are usually paid there is no objection to the extra remuneration, but objection is made to the filthy, disease-breeding conditions resulting, in which children must live.

Recently the plan of requiring a regular report on the cleaning was begun. The report is made at the close of each six-weeks period. It covers washing windows, scrubbing floors, cleaning woodwork, etc., and requires the signature of the teacher in the room. This report keeps the work constantly before the janitor, teacher, and principal, and brings a summary regularly to the attention of the superintendent. It is safe to say, that in the cleaning phase of our janitor work we get fully twice as much work from the same force of janitors with no increase in cost of service.

These measures—definite schedule and regular report—have brought results "of which we do know." Dr. Dresslar of the Bureau of Education has called my attention to a recent development in the way of further improvement and standardization of janitor service. It is the selection of a head janitor centrally located who shall instruct other janitors in details of the work with the notion of bringing the poorest up to the standards of the best.

My investigations and experience justify the following conclusions: First, there is a surprising absence of standards in janitorial service. Second, being physical and manual, almost every phase of janitorial service lends itself readily to standardization. Third, increased efficiency of janitor service and more sanitary conditions for the child follow quickly upon standardization. Fourth, a regular system of reporting aids in maintaining the efficient service required by the established standards.

THE RELATIVE COST OF EDUCATION OF HIGH- AND ELEMENTARY-SCHOOL PUPILS

E. O. HOLLAND, SUPERINTENDENT OF SCHOOLS, LOUISVILLE, KY.

What proportion of the school revenue should be devoted to the care and instruction of the elementary pupils and what proportion to the education of secondary pupils? In glancing thru the annual publications issued during the past ten years, by the National Education Association for its various departments concerned with public-school work, I was unable to find any detailed discussion of this important subject.

At one time, not many years ago, the traditional elementary- and

secondary-school work seemed to meet the demands, if not the needs, of the general public. At that time, too, a more careful analysis of the relative expenditures of public money devoted to the elementary and the secondary divisions of a public-school system was not of great importance, since these expenditures could be roughly estimated and a fair proportion maintained. Even with the introduction of kindergarten work in many of the school systems, the danger of weakening the efficiency of one large department of the school work was inconsiderable, especially where the superintendent was given reasonable freedom of initiative. But today, with the establishment, for example, of continuation schools for the pupils who abandon the traditional classroom work at an early age, and with the creation of special schools for the anæmic, the foreign-born, the defectives, and the incorrigibles, the task of maintaining the proper equalization in expenditure is much more difficult and requires a more careful analysis.

This is obvious since most of the special types of schools, recently established, care for children that belong to the general elementary field. Consequently there is a decided tendency to maintain all these special schools from the funds that have usually been set aside for the maintenance of the elementary schools alone. Another additional drain on the elementary-school funds, which should be considered here, is due to the larger enrollment in the grades for which our more effective compulsory-education laws are directly responsible.

So far as I have been able to learn, there is no school system in this country that today is spending too much money on its graded schools, but it is not difficult to give the names of several large cities that are spending entirely too large amounts on their secondary schools.

Unfortunately the more intelligent forces of a community do not wait for an analysis of school expenditures to make known their wishes; they are especially insistent in their demand that the high schools be properly cared for. Generally speaking, only a small group of these same individuals will visit a ward or graded school and demand that more money and effort be expended upon the younger children. As a consequence, the greatest disproportion in expenditure can be found among those cities where expert educational leadership has been ignored and where disproportionate expenditures follow the wishes of a small but powerful group of citizens who do not understand that the granting of their demands by the school authorities will entail hardship upon hundreds of teachers in the grades, lower the efficiency of the whole public-school system, and will be the direct cause of increasing the school mortality at an alarming rate.

The expenditures in the city of Louisville for secondary education have been and are still out of all proportion to what has been spent on the elementary schools in that city. I shall give the details concerning this situation, since I am familiar with them and they serve to emphasize the need of establishing some general standard to determine expenditures.

Louisville is a city of slightly less than a quarter of a million inhabitants, and yet a year ago it was attempting to maintain seven separate high schools. Three of these schools were for girls, two for boys, one—the commercial high school—for both boys and girls, and a colored high school for both boys and girls. When we consider that the city of St. Louis, with a population of 687,000 inhabitants—three times as large as Louisville—is today maintaining but five secondary schools, we can understand that, relatively speaking, Louisville has been neglecting her elementary schools, in which 90 per cent of the entire school enrollment is to be found.

Very recently the members of the Louisville Board of Education began to make an investigation to discover how much of a disparity there was in these expenditures. In comparing Louisville and Indianapolis, cities of the same size, they discovered that the enrollment in the two Indianapolis high schools was in excess of 3,600, while the seven Louisville high schools had an enrollment of 2,700 pupils, or 900 less. Furthermore, they found that, based upon enrollment, it cost $58.77 to educate a high-school pupil in Indianapolis, while in Louisville the cost was $76.76 per pupil. It should be stated here that the Louisville high-school buildings and the laboratory equipment are not superior to the buildings and general high-school equipment found in Indianapolis.

But the discouraging and unfair part of the high-school organization in Louisville was discovered when a further analysis was made, showing that Indianapolis spent on its high schools but 17.7 per cent of its total revenue, while Louisville spent 27.3 per cent. At the same time it was found that Indianapolis expended $34 for every child enrolled in the elementary schools, while Louisville expended but $23.32. This difference between these two cities in expenditure for the elementary schools would be more than $250,000 or approximately $450 for every graded schoolroom in the city of Louisville.

As soon as the above facts were discovered the Louisville Board of Education began to take steps to reduce the abnormal cost of its high schools, and by the middle of this scholastic year, an addition had been erected at the Central Girls' High School building and the three girls' schools combined. At the same time, the Commercial High School was abolished, and the girls in that school were sent to the Central Girls' High School and the boys to the Male High School. As a result of this consolidation, the saving at the Central Girls' High School in salaries of teachers, janitors, matrons, and assistants will be this year in excess of $20,000, and the saving at the Male High School will not be less than $8,000. Furthermore, the enrollment of girls due to this consolidation has not decreased as some predicted; in fact, there has been an increase in the enrollment of between one hundred and fifty and two hundred.

But even yet the expenditure of 23 or 24 per cent of the school revenue on the high schools in the city of Louisville is abnormally high. If the two

high schools for boys could be consolidated and a new building erected to accommodate them, it is estimated that between $10,000 and $15,000 could be saved each year. This saving in Louisville is essential to the development of a modern elementary-school system, such as can be found in many of the cities of the Middle West. If this were done additional money could be devoted to the elementary schools, and thousands of boys and girls in the intermediate grades of our public-school system would not then be tempted to abandon their educational opportunities at the end of the compulsory age period. Instead, hundreds of our children would be induced to continue until the seventh or eighth grade, and better still, many of them would find it possible to complete the high-school course of study.

This disproportion in expenditure for elementary and secondary education in Louisville is probably no greater than it is in many other cities of this country, and therefore it will be of interest to boards of education in other places. This disparity in the expenditure of school revenue of course can in no sense of the word be considered typical but will serve to emphasize the need of a more careful estimate of our expenditures for the various school departments.

Certainly we cannot assume that a child in the elementary school is not just as important to the welfare of a community, or to a state, as is a child enrolled in one of our high schools. It is true that the leadership of this country comes from the young men and women who continue their education thru, if not beyond, the high-school course, but the foundations of our social structure are dependent upon the education and guidance of the thousands upon thousands of boys and girls whose economic efficiency and whose social and civic ideals are based upon the work of elementary schools.

Fortunately it will not be long until we shall have some definite standards to set up in estimating the relative amount of money that should be spent for elementary and secondary education, and even on the newer phases of public-school work. Dr. Harlan Updegraff, specialist in school administration of the Bureau of Education, has just made a careful study of the expenses of school systems in cities of 30,000 inhabitants and over. This publication will be ready for distribution within a few weeks. In it Dr. Updegraff states that the object of issuing this publication is primarily "to provide those charged with the administration of public schools in the largest cities of the United States the means of making exact comparisons of cost between any two or more cities." In my opinion this is a most valuable contribution in the field of school administration.

Of the 184 cities in the United States in 1910 with a population of 30,000 or over, Dr. Updegraff has made a minute study of the school expenses of 103 of these cities. In order to make more careful estimates, he has divided these cities into four groups, according to size. Two of these tables "show in detail for each city the annual cost per pupil, based on enrollment,

of each kind of expense for instruction, operation, and maintenance of elementary and secondary schools."

After presenting his data, the author raises the question, "What is the range of a proper ratio between average costs of elementary and high schools?" Taking the detailed facts concerning the school expenditures in the 103 cities he studied, Dr. Updegraff states that the best, or at least the most representative school cities—those within the middle 50 per cent of the distribution—spend from $1.80 to $2.60 per high-school child as against $1.00 for every child enrolled in the elementary schools. The median city spent $2.16 upon its high school for every dollar spent on the grades. If this standard could be enforced in many of our leading school cities, the question of elimination and retardation would not give us so much concern, for certainly more children would be saved to the schools and advance more rapidly in their work. Most of us will agree with the author of the bulletin when he asserts:

> In some cities it would be a far better distribution of public funds to take away from high schools having high average cost and high percentage of funds devoted to them and add the same to the broadening of courses in the elementary schools in order to meet the needs of those who are backward or who are losing interest in the present curriculum.

ROUND TABLES

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

TOPIC: AGRICULTURE IN THE RURAL SCHOOL

THE EDUCATIONAL VALUE OF AGRICULTURE

EARL BARNES, LECTURER ON EDUCATIONAL TOPICS, PHILADELPHIA, PA.

Education is everywhere today turning from the predigested forms of knowledge found in books to the real things found in life, from an exclusively intellectual training to developing and disciplining all the powers of the individual. In this movement new groups of activities are being selected and organized as educational instruments. Nature-study, industrial or vocational education, plays and recreation centers, practical civics, and agriculture are among these new lines of study now being urged upon the attention of educators. Of these subjects, nature work and the activities gathering around recreation centers have been pushed forward primarily because of their supposed immediate value to the children. Industrial or vocational training, practical civics, and agriculture have more commonly been urged because of community needs, tho they have also been supposed to possess educational value for the children.

The aim of this paper is to ask what agriculture, as a subject of study, really does to the children who pursue it. And by the study of agriculture we do not here mean the working-over of textbooks or lecture information about climate, soils, plants, and products —we mean, instead, lessons under competent direction, mainly out of doors, in which the children work with real soil; prepare it for planting; select, test, and plant real seeds; cultivate, water, fertilize, and protect the plants that spring from their seeding; and gather and use the products of their labor. If pets and domesticated animals can be added, the possibilities of training are greatly increased.

As a subject of study for children, agriculture has an evil record which it must outgrow. Children all over the world are fleeing from the farms to the city. Isolation, monotonous drudgery, lack of social and spiritual stimulus have made work on the land a thing to be dreaded by all who long for life more abundantly. But we are not here discussing the evils associated with farming for profit, nor the desirability of farming as a business, nor even the need of the community for intelligent and happy farmers. We are discussing the effect of lessons, planned for educational results, not for farm profits, conducted in pleasant school gardens, and on neighboring farms, and stopping short of the empty weariness that makes many of us remember our childhood with pain and regret.

In the first place, then, such a study of agriculture as we have indicated commands from the start a wide range of the interests most common to children. School children are active, concrete, and personal in all that they think and do, as compared with adults. Planting and cultivating things appeal at once to all their native interests. There is something doing all the time; the children are studying concrete things that can be seen and handled; and each child has a steady personal relation to the things he plants and protects or neglects. Even the child's native desire for struggle and contest is amply satisfied thru rivalry with his fellows, and the incessant fight against sterility or overgrowth, drought or excessive moisture, pests or thieves. In most of our older school studies, these interests have to be awakened by indirection and maintained by artificial expedients. In agriculture, they spring to the front at once and the teacher has only to use them. In a word, the study is deeply attractive to normal children of all ages.

Probably all thoughtful educators will agree today that sound education consists in receiving impressions from the external world thru end organs of sense, passing them along afferent nerves to ganglia of nerve cells, where they are registered as images, and generally also compared and associated with other memory images, and then the impulse is passed out along efferent nerves to muscles, producing activity in some way corresponding with the impression originally received. To put it differently, good education, especially in the earlier years, should give the children a body of significant impressions, should lead them to register these as memories and work them up in associated groups and reasoned sequences, and should then pass them over into appropriate expressions.

In the study of agriculture the child is compelled to repeat this cycle again and again. When he walks into the school garden, he observes the soil of his plot, and probably feels it with his hands; he registers these impressions as memories, compares them with impressions of adjoining plots, and then these registered and associated impressions pass over naturally into expressive action with spade or hoe or rake. Again, when he examines the seeds, he gains a body of agreeable impressions thru eyes and hands; these impressions are mentally registered, compared, and associated with memories of other seeds just used or about to be used, and then the impressions pass over into vital expression thru planting.

These cycles are repeated in endless variety across the period of growing a crop. Think of the varied experience from plowing, or spading, thru planting, thinning, transplanting, watering, fertilizing, fighting pests, to gathering and using the produce. When used only for educational purposes, each process can be maintained long enough to give drill and discipline, and yet stop short of the physical weariness and monotony that would destroy the best effects of the training. Meantime, each of these cycles grows out of those that preceded it; and all form a deeply significant series.

Ordinary school tasks give the fundamental cycle of impressing, registering, and expressing only most imperfectly. Even nature-study, so far as it is not agricultural education, whether it is conducted in the museum or in the field, must fall short of actually growing things in which the child is so personally interested. And it is only by passing thru this cycle again and again that the child is prepared, when he becomes a man, to examine, judge, and act.

To approach the whole subject from a different point of view, while the work is new, and before any of the processes have become habitual, a very wide range of mental powers is called into use. As the child digs in the soil, he is forced to observe the hard and the soft, the wet and the dry of loam, clay, sand, and gravel. He sees, feels with his hands, and works in impressions thru the play of his muscles. The inevitable slowness of the process gives time for the impressions to sink in and become permanent. Impressions received while spading up the garden bed are more liable to remain in the mind than those gained in most classroom recitations. So when he comes to plant the seeds, the child sees and handles attractive objects, having definite shapes, agreeable colors and lusters, striking or agreeable tastes. He watches, that is, observes, the earth intently, waiting for the first shoots to come forth. Increased growth and new leaves multiply the impressions. Pests call out intensive observation; he watches the sky for rain; and the final crop rounds out a wonderful series of significant, graduated, related, repeated, and varied observations.

Measures and comparisons are forced upon the child in the agricultural lessons at every turn. In the world of nature, law is supreme, tho no two things are ever the same; and the differences in richness of soil, in rapidity of growth, and in size of products are backed by desire to gain or fear of loss which quicken the processes of the mind. The surface of the plot must be measured, the length of the rows and their distance apart, the rapidity of growth, the part that survives and bears fruit, the quantity of products, and the amount of work, all call for exact statement.

Passing judgment on these observations and comparisons is also forced upon the child. Shall he grow beans or corn? If corn, shall he plant it on this end of the plot or the other? Near his neighbor's corn or away from it? Has he watered it enough or would more be better? Will this plant bear transplanting? How can he do better next year? In working with real and growing things, in which he has a personal relation, all of a child's mental powers are called into play to an extent hardly possible in the artificial exercises of the schoolroom.

With the older children, the problems of soil composition, proper fertilizers, development of useful varieties of plants and animals; fertilization; food values; geographical distribution of plants and animals; working-up of agricultural products, and economic and social problems offer an endless field calling out all the powers of the mind.

On the moral side, lessons in agriculture can admirably train a child in all the humbler virtues of life. He must be careful, exact, patient, and persistent if he would eat of the fruits of his labors. He must work beyond the point of pleasure; and he must wait beyond the span of a child's vision. He must protect his own plot and respect his neighbors'. Above all, he must bow to eternal law. When he neglects to water his plot and his plants fail, there is no chance to complain of unfair discrimination and shift responsibility to others' shoulders. Nature has marked his recitation with a zero and against that decision there is no appeal. He is taught to worship at the shrine of Necessity, and he thereby finds his place in the universe.

So on the artistic side, he may make his plot a perfect oblong or a square. He may have the rows straight or round, the soil free from weeds, well worked, and evenly distributed. He may surround his plot with a good walk, well kept. He may arrange the plants in agreeable groups and he may beautify it all with flowers. All the elementary problems of form, color, and proportion may be realized in the individual gardens, and in the groups of gardens; and so the foundations of a sense of beauty may be laid.

On the social side, too, there is abundant opportunity for emulation and co-operation. Plants will be started in a common hot-bed. The children will lend or borrow each other's seeds, plants, tools, and labor. It is a place where each for himself and each for all wins. The older children will see, too, the relation of their crop to the life of man. They will see that the earth is the mother of us all; that all we have comes from her bounty; that no child born on the earth should be shut away from the use of the earth.

And yet, as a training for life, agricultural education has very definite limits. It gives most superior training in elementary processes of mind, feeling, and character, but it needs wide supplementing. The farming population has always furnished strong basal energy for higher civilization; but the arts and sciences, social sensibility, and power of co-operative action have been developed in the towns. The Roman Cato is the type of agricultural product in the past; hardy, unbending, persistent, frugal, and just, but lacking in imagination and sympathy, he and his kind lay the foundations of empire; but such energy must be passed thru Athens to develop the higher life. Of course, the application of science to farming will lift the level of agricultural life; but the elemental forces of nature cannot yet be sufficiently brought under control by science to prevent their shaping those who deal with them to their own qualities.

Agriculture teaches boys and girls to work, but they also need to learn how to play. School gardens are laboratories of conduct, but the playground is a more advanced class. In the school garden Nature rules with an iron rod, but in the playground the child's spirit finds the open. Soil will be just; but the leader in the games may be generous. Hence every school garden should have as a neighbor a recreation field.

Agricultural education trains observation, comparison, and good judgment; but it discourages pure reasoning. Whatsoever a man soweth that shall he reap, if he does. Storms, drought, or blight may determine the conclusion as well as a major premise of intelligent care. Any farmer who thinks must be a pragmatist, with strong tendencies toward determinism. But meantime the children have minds that are rational and that move independently of storms or drought. Hence they should have pure mathematics, logic, and languages.

And on the moral side, Nature is carelessly fecund, shamelessly prodigal, or niggardly. Of man's higher justice she knows little; and of his mercy, nothing. From his lesson in agriculture, the child should turn to the Sermon on the Mount if he would see the whole circle of man's possibilities.

In fact, for all the larger and freer vision of life the child must leave his garden and go to the mountains and the sea, into man's heart thru history, biography, and literature, into his dreams thru philosophy, music, and the arts.

Our trouble in the past has been that we have tried to take our school children directly into this abstract world of exact thinking and exalted feeling without passing them thru the preliminary stages of concrete experience, elemental virtues, and active self-expressions. Lessons in agriculture will give this fundamental training on which all the higher development of the faculties must rest.

THE NEXT STEP IN TEACHING AGRICULTURE IN RURAL SCHOOLS

E. C. BISHOP, SCHOOLS SECTION, IOWA STATE COLLEGE, AMES, IOWA

There is no common next step in the teaching of agriculture. There is no common next step in teaching any subject.

Dr. Gulick says that there is no common normal condition which may be applied to all children. Associations, hereditary influences, temperament, environment, previous conditions, past experiences—these combine in the determination of what constitutes a normal degree of development which might be called a measurement of human development at any particular period in the case of each individual.

The "next step" implies a step already taken. The next step has direction, speed, form, and objective point. These are determined largely by the previous steps taken, by the condition of the pathway, and by the existing weather and other environmental influences.

The teaching of agriculture has experienced a wonderful development in the short time in which it has been given general recognition. But that development has not been

uniform in kind, quality, or rapidity. The development has been sporadic. It has been by individual teachers and other leaders, by school districts, by counties, by states, and by sections of the country.

Agriculture teaching so far has been largely a community affair, depending for advancement upon the number of local or community supporters, their enthusiasm, their powers of persuasion, and the disciples and help they have been able to gather about them and put to work.

Each succeeding community can and sometimes does profit by the experiences of other communities in the development of agricultural education. But up to this time, each community has had to pass thru much of the evolutionary stages of the work to be at the point where the best things in agricultural education might be applied. The ordinary stages of development are somewhat as follows:

1. Recognition that there are some facts, experiences, processes, and applications in agriculture practice which are worth knowing by all engaged directly or indirectly in agriculture as a business, and by those who have an associated interest.
2. Recognition of such knowledge and skill as real education.
3. That such education has economic value and cultural value.
4. That education in agriculture can be given in the public school.
5. That it has a defined body of knowledge and that it has a relation to other branches of learning.
6. That a place can be found for it in the public school without detriment to the teaching of the time-honored required subjects in their old theoretical forms.
7. That the subject merits the support it needs in order that it may be effectively presented.
8. That even tho it upsets some of the time-worn applications of pedagogy, it must have a place and a hearing in schools which train for citizenship, service, and happiness.

For the purpose of securing information which would help me to define the steps already taken in teaching agriculture and the direction and form of the next step which will help the teaching of agriculture to proceed in a direction and with a force that will reach some desired point, I sought opinions from some of those persons who are especially interested and acquainted with the subject by reason of personal experience or official position. I asked opinions of all state superintendents, a large number of progressive county superintendents, some directors of high-school agriculture, and from deans of colleges of agriculture. The replies were prompt, generous, and varied. I had thought of the next step as somewhat plainly defined. But the replies caused me to experience a somewhat dizzy sensation.

Taking thru imagination the next steps suggested, I found myself endeavoring to elect between forty-six different directions, kinds of steps, and styles of stepping. I found myself first stepping evenly from one position to the next, then leaping over a number of paces or turning backward somersaults; sometimes alighting in a dignified position on a footing at first seeming solid, then wabbling or falling off my mushroom support. Sometimes I was stretching for a forward reach or a backward extension or a side step both ways. However, it was very good exercise. I have some new pace measurements and know some new stepping values.

Recollecting my experiences with horses, of which I am more fond even than of teaching, I was caused to reflect that the short-legged Shetland, the prairie broncho, the well-rounded coach, the solid Percheron, the massive shire, the Hambletonian horse, and the Indian pony each have their ways of stepping—first, next, and afterward; that in the evolution of his kind, the horse yet furnishes us varieties—graduated in a more or less irregular scale from the wild horse who goes it alone to the groomed, trained beauty which requires the constant attention of a man who draws a salary as large as a house full of us pedagogs who do nothing more important than train boys and girls.

Returning to the evolution of agricultural education, I am led to reflect that, strange as it may seem to those who have been in the midst of the struggle for two decades, some communities in the, so to speak, unexplored parts, are yet enjoying the freedom of the

wild, free horse which neither supports nor is fed by man. Some communities are in the breaking-broncho stage and the tenderfoot riders are having trouble to keep their seats without "pulling leather"—sometimes not then.

I saw three women riders out at the Custer County fair in Nebraska last year. They were in a three-mile relay race. Two stayed on; one tumbled when the horse fell. An unkind man on the side-lines said that women should not try to ride horses. Only men can know how to keep going around a race track, which might be injured by French heels. Perhaps he was a school officer who yet thinks that only a man can teach agriculture.

Some communities are in the race-horse stage, some in the big draft-horse stage, some the family horse, and some no horse at all. Some ride in autos and some go thru the air.

The step differs according to the speedway, the furrow, the drive, or the pavement; according to the load, the driver, and the stage of evolution thru which roads, horses, loads, and drivers have passed, before the present combination arrived.

Agricultural education is just now growing surely but in patches, as the cocklebur and thistle of the field. It is in some places in the quack-grass condition, where a solid growth of healthy quack grass is disturbed by the plow and its seedling pieces scattered over the whole field, where it develops according to immediate relationships of nourishment and care—sometimes into healthy quack grass, sometimes just quack.

The replies received from more than a hundred school administrators indicate to some extent the stage of development of the respective communities represented. They include the first step, the beginning stages where the work is the arousing of an interest among the people thru farmers' institutes, extension work, contests for young people, county fair exhibits, and state and national aid as an inducement.

The next steps described are those leading to demonstration and experimental work, working with things, not books; providing better-prepared teachers, better-equipped schools, and workable courses of study with state, county, and township supervisors of public-school agricultural education. Some steps lead to the establishment of strong departments of agricultural education in state colleges of agriculture and in state normal schools, and to normal-training departments in high school with elementary courses in agriculture directed and taught by well-prepared men and women.

The replies so generously made to my inquiry are very interesting reading. They indicate conditions or degrees of advancement as well as opinions of procedure. Analysis of the opinions reveal two striking peculiarities: first, the diversity or variety of different next steps suggested—there were forty-six of these; second, the uniformity of opinions coming from communities which are enjoying the same comparative degree of development in agricultural education. I regret that I cannot read to you many of these well-worded, carefully thought-out opinions, offered by men and women who have great interest in this subject.

The next steps suggested include everything in agricultural education from a boys' corn contest to a college course in agriculture. They include method in all its stages from story-telling to well-equipped laboratories and field experiments. They include activities from the dainty teacher who must put her hands into the soil, to the township, county, and state special directors of agricultural education work.

They include equipment from an empty crayon box to fully correlated and equipped, specialized courses of study from the kindergarten to the college-graduate work. They include reorganization work all the way from timidly asking for a hearing under an assumed name in the nature-study, geography, physiology, botany, physics, chemistry, zoölogy, spelling, language, reading, and arithmetic classes to the urgent demand for a complete reorganization of the entire courses of study so as to give agriculture its proper place in the great scheme of education.

These opinions ask for assistance all the way from a rural-school officer's friendly attitude to state and national aid and drastic legislation which would force the teaching of the subject all at once everywhere whether teachers are prepared or not and without

the consent or the interest of the parents. They include desired literature all the way from picture cards and ready-made charts to impeachable textbooks and encyclopædias which never become out of date.

But I have already given you the summary which indicates as great a diversity of steps as there are conditions of advancement in the work of communities.

Each community is ready for the next succeeding step as previously indicated. Some communities take two or three of these steps at once, then proceed forward with a backward form of step for a distance in order to slacken their pace with dignity and prevent retreat until the foes in front grow weary (and wiser) and the good folks in the rear catch up.

But the general onward march is with about the same formation and speed except in those places where an especially strong leader breaks away with his followers and enters the newer field on his own initiative and responsibility.

But I was to point out the next step. This next step is the one for which the most advanced communities are now ready. The other "next steps" demanded have already been taken somewhere. The step called for by far the greatest number of educators whose opinions I sought is the important step which must now be taken if the teaching of agriculture in rural schools or in high schools is to be given properly. It is that of the better preparation of teachers for the work. Better teachers with better training in agriculture is the crying need just now which must be met if the work is to be advanced, or even saved from disastrous affliction.

The demand for the teaching of agriculture in the communities where the preliminary work has been done is already much greater than the present number of properly prepared teachers can supply. We cannot, and would not if we could, stifle the demand for agriculture teaching. It is a healthful cry for hygienic educational nourishment. We must provide the required teachers. These teachers must come from strong departments of agricultural education in colleges of agriculture to supply high-school and normal-school teachers of agriculture. They must come from normal schools to supply grade teachers in towns and cities and village high-school teachers. They must come from normal-training high schools to supply teachers for the rural schools. The rural schools' greatest hope just now is the courses of normal training provided in high schools for the elementary training of those persons who are to become rural-school teachers. New York state, Nebraska, Kansas, Minnesota, and Iowa are some of the states already doing this and the good work is spreading and growing within.

While we are preparing these needed teachers, we may well be working out better courses of study in agriculture not only for rural schools but for all public schools. Agriculture as a subject has not yet settled down into its proper place in the public-school curriculum. A shifting of the entire science course and a better correlation with other branches are the movements under way which will require the second next step after we take the one now needed in the better preparation of better teachers for the rural schools.

DISCUSSION

Reed B. Teitrick, deputy superintendent of public instruction, Harrisburg, Pa.—The growth of agriculture has modified the civilization of the world. It has been a factor in abolishing cannibalism, producing slavery, and modifying governments. The "nest places" of civilization and the homes of the classic nations have been the garden spots of nature. This morning more than ninety-two million people in the United States awoke and turned their faces to agriculture for their breakfasts. How many domestic animals—mute partners of toil—were fed from the same source cannot be accurately stated. Can such a subject be without some educational value? Comenius said that as far as possible men are to be taught to become wise not by books but by the heavens, the earth, oaks, and beeches; that is, they must learn and examine the things

themselves and not the testimony and observations of others about things. Children are raw material waiting to be developed. Agriculture is one of the chief subjects which links man to mother earth. It employs the hand as well as the head.

Nature has been man's teacher. Nature-study is the starting-point in teaching agriculture. I do not mean a weak sentimentalism about nature-study. I mean that power which comes from seeing, handling, and making things and drawing proper conclusions from the impressions gained in these ways. Whether agriculture shall have an educational value or be mere speculative theory depends wholly upon the way it is taught. There must be a sharp distinction between teaching city children the most elementary fundamentals which they need, and the classification and application of scientific principles based upon facts which rural children already possess.

There are two basal laws of teaching and they are equally applicable to theoretical and to applied education. They are, first: that the learner must be taught on the basis of what he knows, and second: on the basis of what he does. Teachers of today are not satisfied to fire blank cartridges; they want to hit the bull's-eye. We *must* look to those forms of education, then, which end in something and express themselves in some form of human activity. Agriculture does this. It relates the student vitally to nature and to life. It is active and constructive. It is rich in human interest. It is only by appealing to a child's knowledge and interest that mental growth can be accomplished. The old speculative problems of metaphysics are gradually being supplanted by the tangible methods of the laboratory. The study of agriculture not only affords opportunity to make use of the principle that interest in life-forms precedes that of interest in inanimate nature and abstractions; but it also accomplishes another important object of modern pedagogic endeavor—that of increasing the unity and joint interest of the rural school and of the home. Agriculture employs the time and claims the attention of more than one-third of our population. It feeds us all; and as we have already observed, the future of a people depends upon the productions of their soil.

If the teaching of any subject is to be effective it must bring about a close adjustment to life. If it is real it will be educative. If it is educative it must have to do with real things. The student soon learns that cause and consequence are inseparable and certain; that the forces of nature are allied with him in his struggle for mastery and that results cannot be doctored. I believe the study of agriculture will bring about a changed attitude toward life. It will broaden and deepen the channels of thought and instead of walking as heretofore, blindly amid the great forces of nature, we shall see order and beauty and law in the origin of the soil, in the summer shower, in the plant, in the flower, and in the fruit. Can a mind be brought into close touch with nature day after day, feeling the influences of its beauty and grandeur and blessings, without being lifted to a higher plane of thinking and living? Improvement of mind comes from the exercise and expansion of the power to perceive and reflect, from habits of attention and application, from self-control and self-respect. How shall we have a harvest of thought unless we have a sowing of sense impressions?

Culture stands for the ability to appreciate the beautiful in art, in literature, and in nature; and the dignity of labor and true nobility of human conduct. Agriculture taught by competent instructors with suitable equipment, combining thinking with doing, is therefore one of the best means for mind-training, especially to those who have faith in the farm and rural life. To them in this subject the arts of the school are related to the arts of life, and aside from its economic value which certainly is not least, there are also the greatest possible educational and disciplinary opportunities. It not only awakens interest and gives purpose but it teaches industry and self-reliance. These are virtues that underlie all culture, character, position, and power.

Dean Davenport, of the College of Agriculture of the University of Illinois, gives seven reasons for teaching agriculture in the public schools. As they have an educational value I quote the following from them:

First: To cultivate the active and creative instinct, as distinct from reflective and receptive, that are otherwise almost exclusively exercised in our schools.

Second: To give practice in failure and success, thus putting to the test early in life the ability to do a definite thing.

Third: To train the student in ways and methods of acquiring information for himself, and incidentally to acquaint him with the manner in which information is originally acquired and the world's stock of knowledge has been accumulated.

Agriculture is well adapted to build up true American citizenship. It blends literary, ethical, scientific, and industrial training into a strong, sensible, inspirational scheme of education. It is social as well as scientific. It is unquestionably as stimulating to manly endeavor and moral civic excellence as ethics and kindred subjects which deal exclusively with the formal studies of education.

M. P. SHAWKEY, state superintendent of free schools, Charleston, W.Va.—The assumption is fair. Important beginnings have been made. Experiments have been conducted and reports printed and distributed. Books have been published. Laws have been passed requiring the science to be taught. Still the results have not been as big as we desired.

The great trouble with our teaching thus far seems to be that its effects have been confined to the towns and cities and to the colleges instead of its taking root in the country where it must operate if it is going to produce crops.

To reach the country we are now turning to the rural schools. We find, however, that to reform the agriculture of the centuries is a big job for so small an institution as the single-room country school. That school does not seem to get hold of the problem in such a way as to do the work. Yet no other school can do the work if it is to be done in the country.

What then is lacking in the country school? Evidently something, and we need not go far in an investigation to discover *one* cause of the trouble, and to my mind the chief cause of it.

So long as a majority of the teachers in the rural schools are girls merely graduated from short dresses, spending a few months in the schoolroom in waiting for their wedding gowns, we need not expect any very serious instruction in farming in those schools. Such conditions must be changed. We are laying a good deal of stress on the importance of training teachers to love their environment. We want them to appreciate country life. But we must never expect them to prize country school teaching more than life in their own home. If we teach them to prefer the veil to the wedding gown, we shall commit a grievous mistake. Great as is the need of these girls in the schools, greater is the need of them in the homes. Moreover, they are moved by a higher impulse and one which we could not change if we would.

The thing which we can and must change is the condition. Managing a school plant, whether it be an institution of a hundred rooms or one of a single room, is a man's job or a woman's job—not a girl's. We should not expect a young girl or boy, single handed and alone, to handle such a problem. When we equip the country school on a scale commensurate with the work we expect it to do and pay a salary that will justify a man or a woman in making a life-job of teaching, then we may hope to revolutionize the country; but we cannot reasonably hope to do so until a radical change is effected in the provisions made for the country school.

The average salary of teachers in the rural schools and grades thruout the United States is $50.00 per month for a year of less than eight months. Such standards are too low. We should provide a minimum salary of $75.00 per month for a minimum term of eight months. When that is done the country school will show more solidity, more vitality, and more influence in the community. It will be able to teach agriculture or literature or anything else for which the public exhibits a great need.

So long as we pay the chauffeurs, the janitors, the saleswomen and office girls, the mill hand and the miner, the policeman and the hotel clerk, more salary than we do the teacher, it will be necessary for us to continue asking, What shall we do to be saved? So long as we continue to pay the barber and the hairdresser more to shape up the outside of our heads than we do the teacher to mold the inside, just so long will the outside work be done better than the inside. We must not expect more of our schools than we put into them. As a nation we felt rather proud of ourselves that we spent $400,000,000 on our schools last year. But we forget that we spent a fourth of that amount for candy and chewing gum, three-fourths that amount for tobacco and cigars, and one and one-fourth that amount for alcoholic liquors. That is, we are proud that our schools are worth four times as much as our candy and chewing gum, one and one-third times as much as our tobacco, and 80 per cent as much as our Tom and Jerry.

While we have done well, yet I want to assert that there isn't a state in the union that has invested in its schools up to the maximum of profitable investment. But if you get down close to the taxation district you will hear a complaint about taxes and the people will ask, Where are we to get the money? It might be to the point to answer, give up a little of your candy and chewing gum, your tobacco and your gin and toddy, but possibly that would be asking an unreasonable (?) sacrifice, so let us say, give up a battleship or some of your extravagance in federal buildings. Perhaps we might act on Professor Bagley's suggestion and reverse the process by supporting our schools for awhile on tariff revenues and run the government by direct taxation. Soon after we do that there will be a volcanic eruption, but the schools will come out of the turmoil bigger and stronger than they have ever been before.

As a step in the right direction, let us have a federal appropriation of at least one dollar per capita for every child of school age in the nation. Make it contingent upon each state, raising a fixed sum per capita also, if you please, but at all events let us have the money and invest it in our schools. Then we may justly ask those schools to do the greater work for the nation for which economists declare there is so great need at present.

As a second step let the taxes on railroads and other public-service corporations be collected by the state and distributed thruout the state on the per-capita basis instead of being bunched in the districts where such corporations happen to operate, as is the case now. These two plans would fill up the country treasuries and enable the rural districts to pay such salaries as would attract and hold strong, experienced teachers. They would be enabled to provide proper equipment and proper supervision with the result that the schools would take a potent part in teaching agriculture, in promoting the good roads crusade, and in fighting the battle for public health.

ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

TYPES OF SPECIAL SCHOOLS IN THE LARGER AMERICAN CITIES

ANDREW W. EDSON, ASSOCIATE SUPERINTENDENT OF SCHOOLS, NEW YORK, N.Y.

Your chairman invited me to make a summary of the movement in the large cities of this country during the past ten years toward the establishment of schools for the education and training of special groups of children.

In complying with this request I confine myself largely to a consideration of the so-called exceptional children, partly because of the time allowance—twenty minutes—and partly because of the magnitude of the problem.

At the meeting of the National Council in 1907, the president appointed a committee of five, Messrs. Van Sickle, Edson, Pearse, Wolfe, and Fitzpatrick, to make a report on the provision for exceptional children in the public schools of this country. At the Cleveland meeting of the Council in 1908 a preliminary report was presented with the

recommendation that a committee be appointed and an appropriation made to continue this tentative study, but owing to a real or imaginary scarcity of funds the appropriation was not made and the work of the committee ceased. The work, however, was taken up two years later by Messrs. Van Sickle, Witmer, and Ayres under the auspices of the United States Bureau of Education, the result of whose efforts is embodied in *Bulletin No. 14*, 1911, recently issued.

In order to secure the latest information on the progress made in this line during the past few years, I addressed a circular letter of inquiry a month ago to the superintendents of one hundred of the leading cities in the United States. The following is a copy:

1. Does your city make provision for the education and training of (1) truants, (2) incorrigibles, (3) mental defectives, (4) the backward, (5) rapid advance, (6) blind or sight defective, (7) deaf or hard of hearing, (8) crippled, (9) tuberculous, (10) anæmic, (11) stammerers, (12) epileptics, as a part of its public-school system? In what year was provision made for each?
2. Which of these classes are cared for in buildings apart from so-called normal children? Which in school buildings with regular grade work?
3. What special equipment is provided?
4. What special course of study is provided?
5. What special preparation is required of the teachers? Is any additional compensation offered?
6. What success has been attained in this work so far as you have observed?
7. Is the sentiment in your city favorable to an expansion of this work?

From the 75 answers received I find that 32 cities are making special provision for truants, 31 for incorrigibles, 31 for mental defectives, 32 for the backward, 19 for the rapid advance, 9 for the blind or sight defective, 15 for the deaf or hard of hearing, 7 for the crippled, 14 for the tuberculous, 14 for the anæmic, 6 for stammerers, 2 for epileptics, as a part of their public-school system.

The point of special interest in these returns, however, is the surprising fact that in 25 of these cities no provision whatever is made for the education and training of any of these exceptional children, while 12 cities confine their attention specifically to but a single class, as follows: 5 to truants and incorrigibles (classifying them together), 5 to backward pupils, 1 to advanced pupils, and 1 to tuberculous. This confession is a sad reflection on the superintendents of the cities where the exceptional children are so neglected.

In a few cases truants and incorrigibles are committed to country truant schools (as in Massachusetts) and in most cities, as yet, mental defectives, the blind, and deaf are committed to state or private institutions.

Some of the replies to the question, "Does your city make provision for the education and training of exceptional children as a part of its public-school system?" were as follows: "This city has no schools of any of the classes named in the circular—*wish it had*." "The matter has not yet received much consideration." "This city should probably be classed as 'backward,' I regret very much to say." "There are no indications of any sentiment in favor of the expenditure of money for the education of these exceptional children—it surely would be favorable if aroused." "There are hardly enough of these exceptional children to warrant the organization of special classes." "Our board of education has recently adopted a system of medical inspection which will probably lead up to some special instruction of defectives." "We expect to make a beginning soon."

The problem, therefore, is not yet fully solved. A good beginning has been made—only a beginning, however. In cities where any provision has been made for the education of these children, it is clearly evident that but comparatively few as yet are cared for in our public schools. The children are with us, and public sentiment can be aroused easily if the superintendent is at all interested.

From the answers to the question, "Which of these classes are cared for in buildings apart from so-called normal children, and which in buildings with regular grade work?"

I find that where provision is made by the school authorities for the education and training of these exceptional children, there is a wide difference in the plan of housing them. Some are in regular school buildings and some in separate buildings apart from normal children as follows:

	In Regular School Buildings	In Buildings Apart
Truants	10	22
Incorrigibles	12	20
Mental defectives	24	10
Backward	27	5
Rapid advance	16	1
Blind	7	2
Deaf	8	8
Crippled	4	4
Tuberculous	5	10
Anæmic	9	6
Stammerers	6	0
Epileptics	1	1

In a few cities both courses are followed, some of the exceptional children being cared for in school buildings where the ordinary grade work is carried on and others cared for in separate buildings.

It is clearly evident here that in many cases the ideal is obliged to yield to the feasible. In many places the regular school buildings are crowded, children by the hundreds, even thousands, obliged to be content with part-time instruction. In such cases it is a grave question whether rooms in the present school buildings should be taken for any of these exceptional children and thus increase the congestion. On the other hand, if some rooms or buildings under the control of the board of education cannot be secured where a beginning may be made at once, that beginning possibly may be deferred for years. The part of wisdom, therefore, seems to be to utilize for these exceptional classes vacant rooms in regular school buildings wherever found, or to take rooms already occupied, even if it necessitates part time in the first and second years. The first step to be taken is to find a room for the purpose. "Where there's a will, there's a way."

The argument for the segregation of truants, incorrigibles, and tuberculous children is based upon the protection and good of the other children. This argument will not hold in the case of other special classes.

In the case of mental defectives—and by this term is meant those children who are somewhat subnormal and yet capable of mental improvement (all imbeciles and idiots being institutional cases)—the advantages of providing for their instruction and training in regular public-school buildings are many. In the first place, these defectives are of all grades. Some of them are but a little off from normal, cases of slow development it may be, some of them are behind in only one subject, so that with individual attention in their studies and with much attention given to physical and manual training, they may soon gain enough to be allowed to go to regular classes at certain periods each day for instruction in the subject in which they show the most interest and greatest aptitude. Again, the opportunity to associate with normal children on their journeys to and from school, on the playgrounds, and in some of the general exercises of the school must be of the highest value to the handicapped. The fact that they are with normal children for a portion of the time must have a much more tonic influence on their mentality than would the realization that they are set apart as dullards. And, again, the education of these classes in regular school buildings provides accommodations for the children near their homes and is also an economical arrangement for the city.

The great argument in favor of having the blind and deaf instructed in the regular school buildings is that parents may not be obliged to make a choice for their children

between ignorance and institutional life. The training that they get in their intercourse with normal children is of the highest value. When parents understand the matter, they invariably choose the public school to an institution for the education and training of their handicapped children.

It takes but a short time for a blind child to learn to read and write by a system of raised dots and to use the Braille slate and typewriters. He is then assigned to a regular grade class with sighted children and does all the work except in writing and drawing. His written work is interlined by the special teacher and returned to the teacher of the sighted class for correction. Additional lessons in handwork and special exercises in corrective gymnastics are given by the special teacher. These children often skip grades and lead their classes. Their progress is marvelous. In the case of the deaf and blind the classes must be small—not exceeding ten—if the best results are to be obtained. The expense in carfare for these exceptional children, if the distance from home to school is great, is usually borne by the city. In the case of the blind the carfare of a guide must also be included.

In several cities the school buildings are used during the summer months for giving the boys and girls who remain at home during the long vacation an opportunity to engage in some form of vocational or industrial work, or of making up back work, gaining promotion to an advanced grade, or of strengthening themselves in their regular grade work. The plan of utilizing the school plant during the months of July and August is growing in favor from year to year.

The replies as to special equipment provided were varied, some of them being, "Such as necessity dictates"; "Material for handwork and constructive work"; "Largely manual and physical"; "Whatever the expert asks for"; "That is still one of our problems."

In nearly all of these special classes emphasis is and should be placed upon manual and construction work. The special equipment usually provided for a class of fifteen mental defectives, as large a class as can well be handled, is fifteen movable and adjustable seats and desks, four or six work benches and equipment, physical training equipment, a piano, and running water and porcelain sink if possible.

For classes of the blind there are usually ten adjustable seats and desks, type slates, drawing cushions, grooved rulers, a typewriter, textbooks with embossed Braille.

For classes of the deaf there are usually found ten or twelve movable and adjustable seats and desks, hand mirrors, a large mirror, vibratory tube, a guitar, tuning fork, Northampton charts, or some equally good for the classification of elementary sounds and for word drill, and many objects to aid in developing the sense of touch.

For the crippled there should be provided adjustable chairs of a special pattern, foot and leg rests, reclining chairs, and a couch.

For the open-air classes there are needed adjustable and movable seats and desks, reclining chairs, a scale for weighing and measuring, chair bags, leg blankets, soapstone foot warmers, worsted toques, woolen gloves, outside coats, and equipment for a simple kitchen.

For the crippled, tuberculous, and anæmic children, provision should be made by the school authorities or by outside organizations for medical treatment and nourishing food, and for a nurse to assist the school physician and to visit the homes. By this visitation the home condition can often be greatly improved.

The replies to my inquiry as to the course of study provided seem to indicate that in practically every city the greatest liberty of interpretation is allowed. Some of the replies were, "No special course of study is provided, but liberal modifications of the regular course are allowed"; "The work is adapted to meet the needs of each individual"; "The course is largely discretionary with the teachers of the classes, the health and mental ability of each child being the guide"; "Freedom of interpretation"; "Special attention given to the fundamentals"; "Manual training and industrial work predominates."

From these replies it would seem that in these classes the child rather than the subject is the center of interest, and rightly so. What a fine thing it would be to have this idea prevail in grades with normal children!

More flexibility, more liberty of interpretation, greater study of the needs of the individual, are the demands of today in schools where intelligence is at the helm.

The answers to the inquiry as to the special preparation required of teachers and the additional compensation granted indicate that skillful teachers from the regular corps are usually selected for the teaching and training of exceptional children. In this particular work the measure of success attained depends upon the teacher in charge, even more than with normal children who will make fairly good progress even when handicapped by merely passable teachers. In many cities the teachers of mental defectives are required to take summer school or extension courses at institutions for the feeble-minded, or to spend a few months in a careful study of the work of these institutions. The fact remains, however, that a large majority of these teachers have had little special preparation for the work.

Teachers of the blind and deaf must of necessity have had a special preparation, or at least must have studied for some months with teachers at work in such schools. Teachers of the open-air classes can readily be found from among those who have a slight inclination toward pulmonary complaints and need open-air work. Teachers of truants and incorrigibles must have in a marked degree firmness and a strong personality. In fact all teachers of these special classes should have a natural aptitude for the work—infinite patience, tact, resourcefulness, intense human sympathy, an appreciation of effort, and unbounded faith in the young people intrusted to them. Such teachers should also be students of the latest literature on the subject—which is abundant—and should make frequent visits to other schools where special instruction is given. As Dr. Johnstone well puts it, "We need above all else forward teachers for backward pupils."

In most cities additional compensation ranging from $50 to $150 per year is allowed teachers of special classes. This extra compensation, the small classes, and an interest in a special line of activity serve to bring volunteers to the front whenever teachers are needed.

The inquiry as to the success attained in the work undertaken met with the following responses: "The success is twofold—better individual progress and the rooms freed from the hampering influence of pupils who cannot be reached in the ordinary way"; "Marked gain physically, mentally, and morally to all pupils, and especially to normal pupils because of the segregation of the submerged tenth"; "Coaching of backward pupils caused 50 per cent to be promoted"; "Results with mental defectives have more than met our expectations"; "Some surprising results noted with pupils in every special class organized"; "Discipline thruout the system improved"; "Success has warranted a slow but steady expansion of special work, as the needs have been more clearly seen."

A few responses showed a little hesitation in claiming much success in training truants, incorrigibles, and mental defectives, but the answers as a whole indicated a deep interest in the problem and satisfactory results.

And to the last inquiry, "Is the sentiment in your city favorable to an expansion of this work?" the following replies were received: "Favorable to making provision for all classes named above"; "I have heard no adverse comment; newspapers are generally very much interested and give more space to our special schools than to any other"; "Sentiment growing gradually"; "Practically all of the parents are eager to have their children take advantage of the special schools, while practically all of the pupils do more than normal work in these grades"; "Some of the women's clubs and improvement clubs are quite enthusiastic over the care of these special classes of children"; "Strongly favor open-air classes, doubtful about truant schools"; "Yes, consistent with the tax rate"; "The only objection advanced is the expensiveness of the work"; "Finances and lack of room have retarded the movement"; "Conservatism has dominated here"; "The only

obstruction is an antiquated charter which does not give the Board of Education authority to include these activities"; "A few people are very much in earnest, the large majority are indifferent."

These replies state fairly well the efforts that have been made and the success attained in most of our large cities to provide an education for exceptional children. It is a fundamental proposition, tho not yet fully recognized in many communities, that every child is entitled to all the education he is capable of receiving. This proposition implies that it is the duty of the state to educate the subnormal, physically handicapped truant, and incorrigible child as well as the normal child, *irrespective of cost*. The birthright of every child is a place in the world and a training that will fit him to fill that place as successfully as possible—to be happy, self-respecting, self-supporting.

Time will not permit me to summarize the development of trade schools, commercial schools, manual-training and technical schools as a part of the public-school system.

I wish, however, to dwell for the few remaining minutes on a line of work that is being carried on by the Board of Education of New York City in an earnest attempt to solve the problem of industrial and vocational training for boys and girls who will drop out of school as soon as the law allows. These vocational schools admit graduates of the elementary schools on presentation of their graduation cards, and under certain conditions other pupils who have not graduated, provided they are fourteen years of age. As a matter of fact, only about 60 per cent of the attendance in each school are graduates of the elementary schools.

The school for boys is designed for boys who desire a preparation for industrial work as distinguished from office work. The particular vocational subjects offered to boys are wood work, including house carpentry and construction, cabinet making, and bench work, wood-turning, pattern-making in wood, and the use of wood-milling machinery; metal work, including general machine-shop practice, sheet metal work, forging, plumbing, molding, and pouring patterns; electric wiring and installation; printing, including estimating costs, imposition, composition, and presswork; and bookbinding.

In addition to learning the elements of a trade, the boys are given a thoro course in free hand and mechanical drawing, industrial design, and the making and reading of blue prints.

The non-vocational subjects taken by all are trade mathematics, including arithmetic, the use of symbols as found in elementary algebra, and plane geometry and trigonometry as used in the trades; English, including business letters, reading, drawing of contracts, and written specifications; industrial history, civics, industrial and commercial geography, applied physics, industrial chemistry, simple bookkeeping, and the elements of commercial law. In connection with their regular work the boys are taken to visit museums, lumber and supply yards, industrial plants, factories, and construction jobs; and representatives of various activities are invited to address the boys from time to time on the topics in which they specialize. Thus the work of the school is made eminently practical.

It is probable that the activities in this school will be increased in the near future by the addition of auto-repairing, sign-painting, electric power machinery, photo-lithography, monotype and linotype operating in the printing department.

The course of instruction in this school is designed to increase a boy's earning capacity by giving him a training which he could not hope to secure if he started to work as an unskilled apprentice. It gives him an introduction to all types of machines and so enables him to avoid being a one-machine man.

The length of the course is two years, tho only one year for the printing course. The school is open every month in the year except August. The school day is from 9 A.M. until 5 P.M., lengthened to accustom the boys to the realities of the business world. Trade drawing and the non-vocational subjects occupy about one-fourth of a school day.

Evening sessions in this school were opened this month for the first time and over 750 boys registered.

The Manhattan Trade School for Girls offers an opportunity for girls to learn to be skilled workmen in a short time and in a larger and more intelligent way than thru trade training alone.

The vocational courses offered to girls are (1) electric power operating, including general operating, shirtwaist-making, children's dressmaking and underclothing, women's underwear, kimonos, and dressing sacques; special machines for hemstitching, buttonhole making, and embroidery; dressmaking, operating in lingerie, fancy waists, and suits, and straw sewing in women's and men's hats. (2) Dressmaking, including uniforms, aprons, white work, simple white embroidery; gymnasium and swimming suits, and dresses. (3) Millinery, including elementary work for assistants, improvers, frame-makers, and preparers. (4) Novelty work, by use of paste and glue, in sample mounting, and sample book covers, labeling, jewelry and silverware cases, lamp and candle shades.

In addition to the vocational courses named above, all pupils take a course in elementary and advanced art, adapted to the work of the trade departments, and pursue such non-vocational subjects as business arithmetic, business English, industries, and textiles, civics, ethics of the trade, and the cost of living, and receive physical examinations and treatment, invigorating, corrective, and recreative exercises, and talks on hygiene and health.

A placement secretary advises the girls as to the kind of work they are to take up, keeps a close watch upon the trades in order to know the kind of work for which there is a demand, recommends girls to places, and keeps a record of them after they enter a line of work.

The length of the course is one year. The school is open every month except August, from 9 A.M. until 5 P.M. each day. The school is crowded to its fullest capacity, the maximum attendance being 400.

The main expense connected with these schools is in the equipment. In the school for boys much practical work is done for the Board of Education in printing, bookbinding, wood-working, repairing, electric wiring, and plumbing, which materially reduces the per-capita cost. In the school for girls the sale of articles amounts to more than $1,000 per month which is turned in toward the support of the school in the purchase of raw material and supplies. In fact it is expected that the school will be nearly self-supporting this year.

In view of the progress that has been made of late in organizing special schools, and of the light that has been thrown on the efforts put forth, I beg leave to offer the following suggestions for the consideration of the superintendents of our larger cities:

1. We have but just entered upon a great movement. As yet we have not grasped the problem, merely touched it with our finger tips. On one plea or another—lack of funds, lack of rooms, lack of trained teachers, or lack of public interest—we superintendents neglect our opportunity and content ourselves with providing for the education of normal children only, or at least of a comparatively few of those who need special courses and special training.

In any city of ten thousand or more inhabitants there are pupils enough for classes in all the groups named, save possibly epileptics, pupils that should be segregated and be given attention and instruction that will best meet their needs.

2. With the exception of truant, incorrigible, and tuberculous children, the classes can best be organized in regular school buildings. In this way the rooms can be secured quickly, the expense will be greatly lightened, and the children will be favored in the distance to be traveled and in their association for a portion of the day with normal children.

3. A beginning may be made thru the department of health. Medical school inspectors and school nurses should open the way thru their investigations and reports to the need of special care and instruction of exceptional children.

4. The superintendent should insist upon small classes and skilled teachers for exceptional children, even if the cost is large. In some cases, as in the education of the

blind, the per-capita cost will be increased four or five times, but it will be money well invested. The people will not begrudge the expense when they understand the work carried on.

5. School buildings should be open thruout the summer for the accommodation of those children who remain in the city and desire to make up back work, to strengthen themselves in regular class work, or to take up some line of industrial work. It is surprising how many children will take advantage of the opportunity to attend vacation schools when the opportunity is offered.

6. For those boys and girls who *must* leave school at an early age to engage in some line of industry, the city should establish vocational schools that will offer practical courses in various lines of industrial activity to all who are fourteen years of age without regard to their academic training or to the fact of graduation from any school.

7. If the board of education cannot secure the necessary funds for the support of any of these special activities, there are, thank God, people of means and warm hearts in any community who will respond to any reasonable appeal for financial support of the schools named above. All that is needed is a superintendent of positive ideas, warm heart, good sense.

8. And in undertaking work along any of these lines, we superintendents should do more than be satisfied to care for the few exceptional children on our hands at the time. We should study causes, methods, treatment, progress, results, and inform the public of the same as well as pass along our experiences to our neighboring fellow-workers for their guidance and direction.

A DEFINITE PROPAGANDA TO IMPRESS UPON THE AMERICAN MIND THE NECESSITY OF AN EXPANSION OF THE FIELD OF EDUCATION TO PROVIDE AS AMPLE FACILITIES FOR EDUCATION BY WORK AND EDUCATION BY PLAY AS ARE NOW PROVIDED FOR EDUCATION BY STUDY

M. G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

(*Abstract*)

I am constrained to present to you as an introductory thought a general statement of the educational outlook today.

The educational mind never sleeps. Year by year it works over its formerly accepted guidance and recasts it. Year by year it reaches out and up for new activities and wider functions. The entire educational world is in constant flux. No traditional processes escape the challenge of honest inquiry. No school law or procedure is so sacred that it is not subjected to new tests and forced to justify itself in the light of changing social, economic, and ethical order. This is a sign of life, and not of decay; of hope, and not of despair; of progress, and not of stagnation. The thing we call education today is a vastly different thing from the concept of a generation ago.

New influences of moment are likely to arise at any time and among any people. There is no zone of exclusive educational propaganda. The world of civilized men is the schoolmaster's workshop. The reporter of educational activities must sit with clear vision and open mind within the educational watch-tower and view impartially the passing pageant. He will see much that is ordinary and commonplace, traditional and unworthy; but he will see here and there the unmistakable signs of activities that hold in their compass rich promise of hope and help to childhood. These he seizes upon, analyzes them, relates them to accepted practice, squares them against great guiding laws, and indicates but does not seek to vindicate their right to be. He wisely submits his evidence to the great jury of thoughtful educators and the still greater jury of human adjustment.

This seems to be the present status of our educational polity. We are asked by the theme under discussion to broaden the day's activities to include not only study but also

work and play. This concept of the school's function greatly broadens the activities of our present-day schools, but it likewise demands a new understanding of the place of education in the life of the individual. This is especially true in great urban centers where, by the refinements of industry and the restriction of free activity, such a type of training is essential to the welfare of the individual.

In one city with which I am familiar, I found that the wise propaganda is the direct appeal to the people. Some years ago the superintendent called to his assistance a group of unselfish and capable citizens to consider the importance of providing play and recreation for the children of the city. In four years this propaganda secured above twenty playgrounds, maintained summer camps, secured from councils funds for a commission to study and report upon needed play provisions for the city, had an act passed by the assembly creating a board of recreation, and influenced the city government to make provision in its loan items, to the amount of a quarter of a million of dollars, for play activities. Today this city is well on the way to as ample provision for play as it has for study. All this was done by appealing directly to the people, and the people demanded and secured the splendid results indicated.

I take it that some such propaganda for industrial training in the schools will produce equally desired results. In Philadelphia we now have such provision for about 70 per cent of our pupils thruout the elementary grades. That the trend of educational thought is in this direction seems obvious to anyone conversant with world-activities in education.

If one were to indicate a movement more radically different and yet more largely promising than another, it is the general movement that in one form or another endeavors to make the school an opportunity not only to study but also to work and to play. The purpose of this movement is to provide by study the essential tools of thought and of expression, and by work and by play to relate the individual definitely with the recreational activities of maturity. The vocational propaganda has achieved substantial recognition. The recreational activity, deep fraught with moral purpose, is steadily sweeping forward. It is just as essential to a stable social order that the individual should know how to spend his recreational hours as it is to spend his vocational hours. The worker is a supporter in most desirable ways of the social order. The idler is a consumer of the social good and a menace, if not a grievous burden, to the social order. In viewing these movements the thoughtful mind will pause long and consider well.

It may be that these activities will speedily bring to pass such cordial understanding of the newer functions of the school as to contribute in no small way to the solution of the mightiest problem of man—the problem of imparting to his followers in the procession of men all that has been bound up and labeled as race culture and knowledge; and at the same time so interrelating this individual to his entire environment and to his inevitable destiny as to make him a worker for his country, a lover of his kind, a reverent believer in his God.

ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

THE SCIENTIFIC STUDY OF ARITHMETIC WORK IN SCHOOL

J. T. GILES, SUPERINTENDENT OF SCHOOLS, MARION, IND.

The subject of arithmetic work in school has for many years been a battle-ground of opinions. Both the content and the current methods of teaching have been assailed and defended by layman and professional alike. Traditional and authoritative methods and courses of study have been supported by the stand-patters, while faddists and progressives have sought to modify the old or to replace it with new methods and revised curricula. "What shall be taught in arithmetic?" and "How?" are the questions over which the opposing forces have contended. Recently, however, another question has presented

itself and has somewhat superseded the others in importance. This question is, "How well are we doing what we profess to do in our printed courses of study?" It is in the solution of these problems that we are now invoking the aid of scientific study as opposed to the rule of authority and opinion.

The final answer to the first of these questions, that of the content of the curriculum, must be sought in the light of the social demand on the school. Society, in whose interest the school is established, is concerned only with the product and not with the processes of education. In arithmetic this demand is mainly a fourfold one. The first thing asked of the school is that every pupil leaving it shall have a certain fund of knowledge—a store of mathematical facts at his command for use in the ordinary affairs of life. Second is desired a moderate degree of skill in the manipulation of these facts—certain habits involving speed and accuracy in a few processes regarded as essential in the life of every helpful member of the community. The third factor of this product is the ability to reason in mathematical terms—to solve the simple problems of ordinary business and professional life involving numerical relations. The fourth factor is more inclusive and more indefinite. It may be expressed as attitude or interest. It has to do with the functioning in life of the habits and tastes supposed to be inculcated by the study of arithmetic.

It is the business of the school first to ascertain the nature and extent of this fourfold social demand and then to produce it as definitely and with as little waste as possible.

As stated above, the content of school arithmetic cannot be determined by the school tself on a-priori grounds, but it must respond to the demands of other social institutions—of the home and of business in particular. This is a slow, self-regulating process, depending much on the locality and the character of the society. Efficiency, however, is wholly within the control of the school, and since the test of method rests in its efficiency, it is with the latter that we are chiefly concerned. The real problem of the school so far as arithmetic work is concerned is to produce with as little waste as possible the changes in the child mind demanded by society.

The factors in this process may also be regarded as four in number, involving (1) the pupil, (2) the teacher, (3) school administration, and (4) outside influences. Each of these is a variable made up in turn of other variable factors. Pupils may differ as to age, sex, native capacity, and previous training. Teachers vary in training and inherited qualities. Administration embraces course of study, supervision, classroom conditions, time allotment, imposed methods, textbooks, etc. The influence of the home and the playground, or the lack of one, is also unknown. Since each of these factors in the process exerts more or less influence on the final product, it is desirable to know as far as possible the effect of varying each of them that is within the control of the school.

It is here that opinion has held sway with the effect that no two schools exhibit the same combination of factors. Until we have a standardized product, however, by which we may measure the efficiency of each system, we must still remain at the mercy of opinion, tradition, and authority.

It is the work of science to create such a standard measure that any teacher or supervisor, by the observance of certain necessary conditions, may easily compare one school with any other school, or with an average attainment in many schools.

A long start has already been made in this direction. Promotion from grade to grade is usually based on the first of the product factors named above, i.e., a knowledge of arithmetical facts. The other three factors have been largely neglected by the teacher. The proposed scientific standard involves two other factors, skill and reasoning power. Attitude, interest, and social functioning cannot be scientifically measured.

The pioneer investigation in this field was made by Rice. His test included the scoring of papers from about six thousand children from seventeen schools of seven cities. From this investigation, he attempted to evaluate twelve possible factors as to their influence in producing arithmetical abilities. Altho his methods have since been improved

upon and altho some of his conclusions were not warranted by the facts presented, Dr. Rice deserves great credit for devising and carrying out with much labor and expense this now famous investigation.

In 1908 Stone tested twenty-six school systems in the 6A grade. He attempted to measure (1) the abilities of the children of this grade by two sets of exercises, one involving the fundamental operations, the other composed of reasoning problems, (2) the time cost, and (3) the comparative excellence of the courses of study used in producing these abilities.

Since this test applies only to pupils of the upper half of the sixth grade, it is of limited usefulness. Its value to teachers lies largely in the refinements of method in giving the test and the precautions against erroneous conclusions in the interpretation of results.

Courtis has more recently devised a series of tests to measure abilities in fundamental operations and reasoning thruout the school from the third grade up. The conditions under which these tests are given insure a very accurate result, when the directions are carefully followed. The objections to this test are (1) that it is too expensive to be used often and (2) that it requires considerable expert knowledge for the manipulation and interpretation of results.

As a further modification of the three tests just mentioned, using what has seemed most valuable in their methods, I desire to propose briefly a formula by which any teacher may at any time measure, within reasonable limits, the ability of any school or pupil in the fundamentals of arithmetic and in reasoning power with abstract numbers. The co-operation of a number of superintendents would be necessary to make such a formula valuable for comparison of different schools of the same grade. The object of the formula is to determine the average rate per minute of attempts and the average percentage of accuracy, together with a measure of the variation in the various fundamental operations and in reasoning.

The conditions under which the proposed tests are to be given are as follows:

1. Time for each test, from four to eight minutes.
2. The tests are to be previously written on the blackboard, plainly, in a good light, and covered by a screen or curtain until the tests begin.
3. The tests are to be arranged in rows and columns, each row containing ten problems and a sufficient number of rows given to supply more problems than can be worked by any pupil in the time allowed.
4. Pupils write on papers previously prepared in cross-sections ten wide to correspond with the arrangement of problems on the board.
5. All pupils to begin writing, giving answers only, as soon as the curtain is drawn and continue until curtain falls.
6. The numbers composing the test to be drawn by the teacher by lot in the following manner: Fifty strips of paper are prepared of uniform size, on each of which is written at regular intervals the natural series of digits omitting 0 and 1. These strips are then cut into pieces of uniform size, each piece containing a digit of the series 2–9. These digits are then placed in a bag and drawn out one by one, as needed in formulating the test. This arrangement insures an equal number of each of the digits to draw from. Zero and 1 are omitted to avoid the possibility of chance combinations of exceptional ease of solution. Tests four minutes long and over, formed in this way, would vary but slightly in the degree of difficulty.
7. Where a chance drawing would result in an absurdity, as in the subtraction of a larger from a smaller number, the order of the last two digits drawn should be reversed.
8. The operation to be tested in each exercise is to be explained to the class by the teacher before drawing the curtain. It should also be written above the test as well as indicated by placing the digits in the positions usually adopted for performing the various operations, i.e., one above the other, with a line below in addition, subtraction, and multiplication and the usual arrangement for short division, omitting all the operation signs $+$, $-$, $\times$, $\div$.
9. Pupils may grade and mark their own papers, which should be checked later by the teacher. From these marks the average or median accomplishment of the school can be quickly obtained and a measure of the variation easily derived.

The subject-matter of the proposed tests is as follows:

(1) Addition in single combinations, also double column with two figures in column.
(2) The same arrangement for subtraction.
(3) Multiplication in which both factors are single digits, also when the multiplicand is composed of two digits.
(4) Short division in which the divisor is a single digit and the dividend two, also with three digits in the dividend.

The reasoning tests include (1) three-quantity one-step abstract problems and (2) four-quantity two-step problems.

The formulae may be expressed by letters which are to be replaced with the digits drawn from the bag. Two letters written together mean a number of two digits, not multiplication as in algebra.

For addition we have:

Find the sum:

$$\begin{array}{cccc} a & c & e & g \\ \underline{b} & \underline{d} & \underline{f} & \underline{h} \end{array}, \text{ etc.}$$

Also,

$$\begin{array}{ccc} ab & ef & ij \\ \underline{cd} & \underline{gk} & \underline{kl} \end{array}, \text{ etc.}$$

For subtraction:

Find the difference:

$$\begin{array}{ccccc} a & c & e & g & i \\ \underline{b} & \underline{d} & \underline{f} & \underline{h} & \underline{j} \end{array}, \text{ etc.}$$

$$\begin{array}{ccc} ab & ef & ij \\ \underline{cd} & \underline{gh} & \underline{kl} \end{array}, \text{ etc.}$$

Multiplication:

Write products:

$$\begin{array}{cccc} a & c & e & g \\ \underline{b} & \underline{d} & \underline{f} & \underline{h} \end{array}, \text{ etc.}$$

$$\begin{array}{ccc} ab & de & gh \\ \underline{c} & \underline{f} & \underline{i} \end{array}, \text{ etc.}$$

Division:

$$\begin{array}{ccc} a)bc & d)ef & g)hi \\ a)\overline{bcd} & e)\overline{fgh} & i)\overline{jkl} \end{array} \quad \begin{array}{l} \text{, etc.} \\ \text{, etc.} \end{array}$$

One-step reasoning formulae:

$$a+b=c \qquad a\times b=c \qquad a\div b=c$$

from which are derived the following problems:

Indicate by the abbreviation add, sub., mul., or div. the operation to be performed in the two given numbers to get the required one.

(1) The sum of two numbers is a, one is b, what is the other?
(2) The difference of two numbers is a, one is b, what is the other?
(3) The product of two numbers is a, one is b, what is the other?
(4) The quotient of two numbers is a, one is b, what is the other?
(5) What number added to b gives c?
(6) What number subtracted from b gives c?
(7) What number multiplied by b gives c?
(8) What number divided by b gives c?
(9) a added to what number gives c?
(10) a subtracted from what number gives c?
(11) a multiplied by what number gives c?
(12) a divided by what number gives c?
(13) a is b more than what number?
(14) a is b less than what number?

(15) a is b times what number?
(16) a is b divided by what number?

The problems in the two-step reasoning test are derived from the formulae:

$$a+b=c+d$$
$$ab=cd$$
$$(a+b)=cd$$

(1) What number added to a is equal to the sum of c and d?
(2) What number subtracted from a is equal to the sum of c and d?
(3) What number added to a is equal to the difference of c and d?
(4) What number subtracted from a is equal to the difference of c and d?
(5) What number multiplied by a is equal to the product of c and d?
(6) What number multiplied by a is equal to the sum of c and d?
(7) What number multiplied by a is equal to the difference of c and d?
(8) What number added to a is equal to the product of c and d?
(9) What number subtracted from a is equal to the product of c and d?
(10) What number multiplied by the sum of a and b equals c?
(11) What number multiplied by the difference of a and b equals c?
(12) What number divided into the sum of a and b equals c?
(13) What number divided into the difference of a and b equals c?

The order in which the reasoning problems are given is also to be determined by lot, two or more sets being used if necessary to provide sufficient problems for the time allowed.

Problems formed from these formulae by chance drawing and given to classes under the uniform conditions named above are open to the criticism that the results obtained from them are only approximate. It is the belief of the author of this paper that they would be sufficiently accurate for the purpose in hand and that they would have the tremendous advantage of easy availability and of universal application. The schools as well as other business institutions must submit to the test for efficiency.

In the hope that such formulae as these proposed will enable us to determine in larger degree what is useful and what is waste in the process of teaching arithmetic, they are here offered for your consideration and for your criticism. Opinions no longer carry authority. Scientific methods of study alone command respect and the time for exact experimental investigation of our educational problems is at hand.

UTILIZATION OF THE SCHOOL PLANT

WILLIAM A. WIRT, SUPERINTENDENT OF SCHOOLS, GARY, IND.

The school idea which I present is not unique and it is not revolutionary. We are trying to put into practice only those things urged for a generation by our recognized educational leaders. In fact, we are extremely conservative and do not wish to take any chances with undigested educational philosophy. The idea that we need an enlarged school to meet the educational needs of the twentieth century is not new. We are agreed that the twentieth-century school must educate for citizenship and character, must develop individuality and efficiency, must develop the power of reflective thinking, form habits of application, and somehow get the child to find pleasure and joy in constructive effort. We are also agreed, I think, that such an education is possible only by giving the child the freedom of self-activity. We are also agreed that the civic care of the child in the twentieth century must include satisfactory public facilities for amusement, play, and work, as well as study.

Personally, I am certain of one thing. We have not realized in Gary the ideal school of the twentieth century. But we are indeed glad to be in a position where we can help in the solution of this problem.

Limited financial resources and a tremendous annual increase in the school population have forced us to attempt an enlarged school activity and at the same time consider the taxpayer. We do not wish to increase our school expenditures, but we do try to get more for our money.

The twentieth-century public school saves the taxpayers money by providing, first, classrooms and libraries where the child can study books and recite from books; second, playgrounds, gymnasiums, and swimming-pools where the child can play and secure a general physical training; third, shops, gardens, drawing-rooms, and laboratories where the child can work and learn to do efficiently many things by doing them; fourth, an auditorium where by lectures, recitals, dramatization, phonograph, player-piano, stereopticon lantern, and motion pictures the visual and auditory education of the child may be done efficiently. Four separate and distinct places are provided for each child, but the total per-capita cost is not increased fourfold. The per-capita cost for classroom study under good conditions is from $100 to $200, for play and physical training from $10 to $25, for work from $20 to $125, for an auditorium from $10 to $25. The total per-capita cost for the four departments is from $140 to $400, or from 40 per cent to 100 per cent greater than the per-capita cost for the study and recitation room alone.

But each child can be in only one of the four places at the same time. The new school so arranges the classes that different sets of children are in the four separate departments all of the time. By this plan the new school accommodates four times as many children, and at a per-capita cost of $35 to $100. By providing facilities for the child's play, work, and recreation as well as facilities for study the per-capita cost of the school plant is only 35 per cent to 50 per cent that of the traditional study classroom school. There is a corresponding saving in annual maintenance cost. Extra teachers and special supervisors are also eliminated, and the per-capita cost for instruction is less than in the exclusive study school.

A much more important feature of the new school is that the children want to go to such a school every day in the year and eight to ten hours each day. The universal problem of keeping the children in school has been solved. The school provides a real life so that the child wants to educate himself at the very moment that he has the opportunity. The play impulse is transformed into a work impulse so that real pleasure is experienced in work. The school life creates a need and desire for the academic and cultural work of the school. There is no attempt to remove the difficulties. The supposed distasteful work of the school is not sugar coated with sentimentalism. The wasted time and the misdirected energy of the street and alley are utilized to awaken ambition, develop initiative, and create power in the child, so that he can find real joy in the mastery of difficulties. The child is busily and actively engaged the year round educating himself.

The worst possible form of an educational plant is a massive brick and stone building with every device perfected for keeping children quiet in a straight-jacket school seat all day long. Children are annihilated in such a school, not educated. The traditional classroom study-school building may answer very well for the mechanical study of textbooks. But real education demands much more than the formal study of textbooks. The new school gives the child one-fourth of his time for the formal study of textbooks and for the formal organization of what he has learned during the remaining three-fourths of his time in real activities. The addition of facilities for real activities in a combined workshop, playground, and school makes real, genuine education possible. The new school does not dispense with books or culture. It provides for a more efficient use of books and a more genuine and thoro acquisition of culture.

When the child is interested in the work and activities of the school, when the child has developed the power of application and concentration, when the child is in a condition where he is capable and anxious to put forth tremendous effort to master the difficulties

of the school, then it is easy and natural for the time and energy of both teacher and pupil to be used efficiently.

Eliminate the plan of teachers trying to teach things that they do not know by means of special supervisors. Permit teachers to teach only the things that they do know and know how to teach. Arrange the size of the classes so that with classes numbering four students or four hundred they are the best possible groups for the work in hand.

Break up the rigid grouping of children in fixed classes. Any child should secure as much time as he needs in any subject or department. If the child is weak physically and cannot undertake for the present formal textbook work, he should use the other facilities of the school as a sanitarium for the recovery of his physical strength. If the child is deficient in percentage because of lack of preparation in common fractions and decimals, he should not be flunked and kept repeating work in percentage. He should go on with his work in the class in percentage and in place of some of the recreation features of the school take extra work in a class several grades below where he can get directly the needed drill in common fractions and decimals. The same principle can be applied in all subjects and for pupils who wish to advance more rapidly as well as for those who wish to make up deficiencies. The retarded, subnormal, and abnormal child can be accommodated without extra teachers or facilities.

Use the great outdoors. Use classrooms, laboratories, shops, auditoriums, gardens, playgrounds, gymnasiums, textbooks, library books, real objects, real activities and occupations; but use each only for that educational purpose for which it is best adapted.

Every part of the school plant can be made an educational opportunity. There is no reason why the school furniture and much of the equipment cannot be made in school cabinet shops under the direction of a cabinet-maker selected for his teaching ability as well as his mechanical skill. There is no reason why the school painting, stage scenery, plumbing, electrical work, carpentry, printing and bookbinding, forging, foundry and machine work cannot be done in the same way. There is no reason why the school engineer should not be selected because of his teaching ability as well as his mechanical skill. The boys can work with this engineer as apprentices during certain hours in the day and learn to fire boilers, operate pumps, engines, generators, motors, heating and ventilating machinery. There is no reason why some of the nature-study teachers should not be selected because of their practical knowledge and skill as well as for their college degrees. A practical landscape gardener can take complete charge of the school garden, lawns, shrubbery, and trees, and the children will be delighted to assist him. Even the stairways and school corridors provide the highest possible educational opportunity, if we will but use them.

The twentieth-century school does the work of the public library and public playground much more efficiently and much more economically.

The school employs specially trained teachers to direct the outside reading of children and cultivate an appreciation for good literature. These teachers meet every child for a thirty-minute period on alternate days. By means of stories and reading from sets of books furnished by the public library, the children are interested in the best literature. This literature teacher's classroom is in reality a library of literature for children, and the teacher is in the truest sense a children's librarian. Many of the books furnished by the public library are supplied in sets of thirty or forty volumes of the same book so that classwork is possible in this directed reading.

Similarly the nature-study teachers have a nature-study library in their laboratory, the music teachers have a music library, the drawing teachers have an art library, etc. The library work is supplemented by pictures, victrolas, piano-players, stereopticon and motion-picture machines in the school auditorium; and by the museum specimens in school corridors. Every child is reached regularly in an organized way. The library maintenance and salary cost per book circulated and read is about one-fourth of one cent, only 5 per cent of said cost in public libraries. The life of a book circulated in sets under

the direct control of the special teachers is ten times that of the usual library circulating book.

In Gary it is hoped to have a branch of the public library in every school, with an assistant librarian from the public library in charge, and with the special teachers in the school co-operating in cultivating and directing the reading of the children.

The unit school plant will accommodate about 2,700 children. The buildings are open evenings, Saturdays, and vacations. Adults use the school buildings as freely as children. The branch library is so placed that it can be entered directly from the outside and without climbing steps. The location of the branch library in the same building with the social, recreation, and study facilities brings to the library many readers who would not otherwise form the library habit. In turn the library helps to promote the other social, recreation, and study features of the school.

The opinion is becoming fixed that we have not utilized the school plants completely unless they are used for recreation and social centers by adults. Fortunately a school plant that provides for the constructive play and recreation activities of children is also most admirably adapted for similar activities with adults. The playgrounds, gymnasiums, swimming-pools, auditorium, club and social rooms, library, shops, laboratories, etc., make a complete social and recreation center for adults. Experience has demonstrated that the facilities for academic instruction add to the attractiveness of the plant as a social and recreation center.

Compared with the cost of such facilities and their use when separated from the school plant, the economy in favor of the combined playground, workshop, and school is indeed surprising. The city of Chicago has a most elaborate system of recreation parks and field houses. Selecting the eleven most successful parks of the South Park Commission, we may compare the total cost and use of the eleven parks with the cost and use of one Gary school plant. Note that the attendance of the parks is the total, not the average for the eleven parks. Also note that the cost of the school includes the furnishing of complete school facilities for 2,700 children, in addition to the social and recreation features.

	Total for Eleven Parks	One School
Population	800,000	20,000
First cost, less land	$2,000,000	$300,000
Annual maintenance	$440,000	$100,000
Annual attendance—		
Indoor gymnasium	310,000	1,000,000
Shower baths	1,385,000	500,000
Outdoor gymnasium	2,000,000	2,000,000
Swimming-pool	725,000	300,000
Assembly halls	270,000	1,000,000
Clubrooms	70,000	50,000
Reading-rooms	600,000	1,000,000
Lunch-rooms	520,000	20,000

The twentieth-century school is planned to secure the highest possible efficiency from buildings, grounds, and equipment, and the time and energy of teachers and pupils. It gives the child not a shop, not a playground, but a life.

DISCUSSION

Harlan Updegraff, Bureau of Education, Washington, D.C.—Educational administration in many of our cities has these three characteristics: (1) the scope of the public schools is gradually extending; (2) increased expenses have accompanied this expansion; (3) the tax rates and the bonded indebtedness are approaching their legal maximum.

Under such conditions any system of school organization that gives increased school facilities without increasing the tax rate is bound to receive careful consideration. The public schools of Gary, Ind., seem to meet this condition. By the utilization of all parts of its buildings and by lengthening the school day to six and six and one-half hours, two sets of pupils are accommodated in the same school plant in which under the ordinary system but one set of pupils could be housed. At the same time the course of study has been extended to cover manual training, domestic science, and laboratory work in the sciences. The entire subject-matter of the course of study has been considerably enriched. More important than this, thru the use of the school building and the playground as a social center, the leisure time of the pupils is spent upon the school premises in wholesome work and play. In this latter phase of the work gymnasiums and swimming-pools, which, together with the playgrounds, are placed under skilled directors, have been exceedingly helpful. Another important feature is the use of the school building before and after hours of the day school for evening schools, for Saturday classes, and for vacation schools. Practically all parts of the building are in use most of the time.

The success with which the plan has met in Gary is sufficient to warrant its trial in other cities where conditions are favorable. It should be observed, however, that it is necessary, in the first place, that the hours of the school day be lengthened, and, secondly, that the buildings now in use be so constructed that the basement, hall, and attic space may be transformed into workshops, laboratories, and gymnasiums.

James G. Riggs, State Normal School, Oswego, N.Y.—Less than a half-century ago the schoolhouse at the cross-roads or in the small village in a farming section answered many more purposes than our present buildings. Besides the six or seven months' school there was the winter singing-school, the occasional writing-school, the spelling-bee with its excitement, possibly a debate with neighboring champions, a temperance lecture, a play on a rural subject in native setting, preaching on alternate Sundays, rarely a funeral but always a meeting-place for young and old, and always a chance for the beginnings of courting and mating for all the countryside. The building paid for by public tax was used for community purposes. It was the educational and social center for the locality. The result was a general acquaintance thruout the whole region among a homogeneous people, together with an exchange of friendship, of views, of goods, and of intellectual stimulus The social results were large. No bad feeling could long endure among people who met so often in so many interests. They were interdependent and self-respecting.

From scenes like these thruout the eastern and middle states went young men with their wives to the westward to help develop this great land and show the East how to do things, as at Gary. Communities are few now which hold the same traditions, religion, and ideals. Various foreign types, tongues, and ways have come in almost in a night, and no provision has been made for them aside from the common school. Even the churches have not gone forward to greet them, to make them feel at home in a new land. Of all people we need to preserve the original democratic social ideals of the communities described and to provide for the interests of those who have so many common needs as strangers—chief among them the need of understanding one another and the ideals inherent in their adopted country.

There can be no return to the spontaneous gatherings at the cross-roads. The telephone, the rural delivery, and the automobile have put an end to those conditions, but have not filled the place of those face-to-face meetings of one friend with another. Nor will our cosmopolitan population take the lead themselves in setting a common meeting-place for common purposes.

It is therefore the duty of the authorities to take the natural means at hand and make them available for community purposes. Some cities and larger towns have already seen their opportunity and have established the school as a center for various activities

which appeal to the newcomer, as the following: school grounds fitted for sports for all, evening instruction in sewing, dressmaking, cooking, English in its spoken and written forms, manual training, music, folk-dancing and ordinary dancing, and gymnasium work. Rooms are provided for a library, quiet games, song recitals and lectures, clubs, moving pictures, and, in some cases, bathing facilities. No better service can be given than to spend a series of evenings during the winter on such a program as this:

The Mayor of the city on "My Office and Its Duties."
The City Chamberlain on "City Funds, How Obtained and How Disbursed."
The City Assessor on "How Values Are Set, with Examples."
The Superintendent of Public Works on "Public Property and Its Care."
The City Judge on "Our City Court and Its Work."
The Police and the Fire Departments.
The Child in the City, and His Education.

Such a program or a modification of it is good not only for the adults who are new to our land, but for natives and for the officials themselves who are in office. It is the best kind of a report to the people, and may well be likened to the initiative and the referendum. The program should be directed by public officials and provided for in the regular budget where expense is incurred. The programs find their justification in the fact that they are educational; even the games and sports, inasmuch as they are orderly and directed. They are the only foil to the saloon and the dance hall with their unwholesome surroundings. They furnish a meeting-place and recreation for those whose rooms or houses are not homes in the proper sense, and they afford an extension of the function of the school to those adults who otherwise would be shut out of many advantages of this new world. Here they may talk over community interests, local improvements, needed reforms, and thus become responsible citizens. When they meet regularly they are likely to think alike and when occasion arises they are likely to act alike and for the common good. Under cordial and sympathetic treatment from native stock the foreigner becomes happily adjusted to the new conditions, and his children may easily become masters in the next generation. Democracy has its best training here among those of foreign birth, and they are wise officials who see the opportunity and embrace it. Ideals are being formed and futures shaped under such conditions where the more favored are, in Browning's phrase, willing "to lend themselves out."

The school authorities should be the active parties in initiating and controlling such use of the school plant, as here dangers may creep in. Matters controversial in politics, religion, or social conditions must be avoided. The object is to harmonize and unify interests, not to set passions astir nor engender strife. Whatever has not the approval of the whole community will be short lived and will react. On the other hand, whatever benefit and uplift come from the use of the school building will so justify the expense that once begun the custom will be permanent.

Such a plan will react on the scholastic work of the school by putting a new and real interest into the work of the day. The building should be so planned, seated, and equipped that it will serve not only the purposes of the five-hour school, but of all the evening activities. Instead of all education centering about the child, his parents are included too, and the authorities will find the added element making the solution of the problem easier because they are helping to solve it.

In a word, the increased use of the school plant for community activities is the recognition of a human need and the effort to supply that need.

THE NATIONAL COUNCIL OF EDUCATION

CONSTITUTION*

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, thru printed reports, of the substance of the discussions and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Education Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demanded the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of one hundred and twenty members, selected from the membership of the National Education Association. Sixty of the members shall be elected by the National Council of Education, and sixty by the Board of Directors of the National Education Association.

Each body shall select ten members annually, who shall serve for six years.

2. The Council shall elect its quota of members at its regular annual meeting.

The Board of Directors of the National Education Association shall elect its quota of members at the second meeting held during the annual meeting of the National Education Association.

3. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership. All persons who have belonged to the Council shall, on the expiration of their membership from any cause whatever, except expulsion, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than twelve members.

* As amended at San Francisco session, July 12, 1911.

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Education Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held in connection with the Department of Superintendence of the National Education Association, or at such other time and place as the Executive Committee of the Council may designate. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Education Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointment of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—OFFICERS

The officers of the Council shall be a president, vice-president, and secretary, each of whom shall serve for three years, with terms so arranged that one officer is elected annually.

It shall be the duty of the president of the Council to prepare, with the assistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

1. There shall be four standing committees: an Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

2. The Executive Committee shall be composed of the president of the Council and three other members, whose terms of office shall be so arranged that one new member may be chosen each year.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report of any investigation which may be ordered by the National Education Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year.

5. There shall be appointed annually a committee of one to submit at the next meeting a report on "Educational Progress during the Past Year," in which a survey of the

important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

6. The Committee on Investigations and Appropriations shall be composed of nine members, whose terms of office shall be so arranged that three vacancies may be filled each year. No proposal to appoint a committee to undertake an educational investigation of any kind, and no proposal to ask the Board of Directors of the Association for an appropriation for any purpose, shall be acted upon until such proposal has been referred to this Committee on Investigations and Appropriations for report.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Education Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provisions may be waived at any regular meetings by unanimous consent.

By-laws not in violation of the constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1912–13

CHARLES H. KEYES	Saratoga Springs, N.Y.	*President*	Term expires in 1913
JAMES Y. JOYNER	Raleigh, N.C.	*Vice-President*	Term expires in 1915
ROBERT J. ALEY	Orono, Me	*Secretary*	Term expires in 1914

EXECUTIVE COMMITTEE

THE PRESIDENT, *ex officio, chairman*

JOSEPH SWAIN	Swarthmore, Pa	Term expires in 1913
JAMES M. GREENWOOD	Kansas City, Mo	Term expires in 1914
ELLEN C. SABIN	Milwaukee, Wis	Term expires in 1915

COMMITTEE ON MEMBERSHIP

THE PRESIDENT, *ex officio*

A. C. NELSON	Salt Lake City, Utah	Term expires in 1913
ROBERT J. ALEY	Orono, Me	Term expires in 1913
JAMES Y. JOYNER	Raleigh, N.C	Term expires in 1914
JAMES M. GREENWOOD, *chairman*	Kansas City, Mo	Term expires in 1914
AUGUSTUS S. DOWNING	Albany, N.Y	Term expires in 1915
CARROLL G. PEARSE	Milwaukee, Wis	Term expires in 1915

COMMITTEE ON INVESTIGATIONS AND APPROPRIATIONS

AUGUSTUS S. DOWNING	Albany, N.Y	Term expires in 1913
LORENZO D. HARVEY	Menomonie, Wis	Term expires in 1913
JOHN H. PHILLIPS	Birmingham, Ala	Term expires in 1913
EDWARD T. FAIRCHILD	Durham, N.H	Term expires in 1914
ELLA FLAGG YOUNG	Chicago, Ill	Term expires in 1914
Z. X. SNYDER	Greeley, Colo	Term expires in 1914
JAMES M. GREENWOOD, *chairman*	Kansas City, Mo	Term expires in 1915
FRANK A. FITZPATRICK	Boston, Mass	Term expires in 1915
PAYSON SMITH	Augusta, Me	Term expires in 1915

MEMBERS

Elected by the Association *Elected by the Council*

TERMS EXPIRE IN 1913

James M. Green, Trenton, N.J.
Augustus S. Downing, Albany, N.Y.
George B. Cook, Little Rock, Ark.
Stratton D. Brooks, Norman, Okla.
Henry B. Brown, Valparaiso, Ind.
William O. Riddell, Des Moines, Iowa
A. C. Nelson, Salt Lake City, Utah
Reed B. Teitrick, Harrisburg, Pa.
A. J. Kinnaman, Bowling Green, Ky.
J. L. Snyder, Agricultural College P.O., Mich.

Fannie Fern Andrews, Boston, Mass.
Bettie A. Dutton, Cleveland, Ohio
Charles H. Keyes, Saratoga Springs, N.Y.
J. F. Sims, Stevens Point, Wis.
Charles H. Judd, Chicago, Ill.
Bird T. Baldwin, Swarthmore, Pa.
A. Duncan Yocum, Philadelphia, Pa.
Clem Hampton, Tallahassee, Fla.
Thomas C. Miller, Shepherdstown, W.Va.
Frank B. Dyer, Boston, Mass.

TERMS EXPIRE IN 1914

W. E. Harmon, Helena, Mont.
David Felmley, Normal, Ill.
John R. Kirk, Kirksville, Mo.
David B. Johnson, Rock Hill, S.C.
Wales C. Martindale, Detroit, Mich.
*Edna A. Rich, Santa Barbara, Cal.
*Arthur H. Chamberlain, Pasadena, Cal.
*M. Bates Stephens, Annapolis, Md.
Jacob A. Shawan, Columbus, Ohio
James W. Crabtree, Lincoln, Nebr.

*Wm. M. Davidson, Washington, D.C.
M. G. Brumbaugh, Philadelphia, Pa.
P. P. Claxton, Washington, D.C.
Harlan Updegraff, Evanston, Ill.
Oliver S. Westcott, Chicago, Ill.
Katherine D. Blake, New York, N.Y.
Mrs. James M. Greenwood, Kansas City, Mo.
Frank Strong, Lawrence, Kans.
C. P. Cary, Madison, Wis.
Homer H. Seerley, Cedar Falls, Iowa

TERMS EXPIRE IN 1915

John MacDonald, Topeka, Kans.
H. B. Wilson, Decatur, Ill.
C. O. Merica, Redwing, Minn.
S. L. Heeter, Pittsburgh, Pa.
*Laura D. Gill, Boston, Mass.
David Starr Jordan, Stanford University, Cal.
Walter R. Siders, Pocatello, Idaho
Edward L. Thorndyke, New York, N.Y.
Edwin G. Cooley, La Grange, Ill.
Frederick E. Bolton, Seattle, Wash.

Miss N. Cropsey, Indianapolis, Ind.
*Lewis H. Jones, Ypsilanti, Mich.
Lloyd E. Wolfe, Memphis, Tenn.
William H. Black, Marshall, Mo.
*Henry Suzzallo, New York, N.Y.
Luther L. Wright, Lansing, Mich.
George M. Philips, West Chester, Pa.
Edmund A. Jones, Westerville, Ohio
Ernest E. Balcomb, Greensboro, N.C.
J. E. Burke, Boston, Mass.

TERMS EXPIRE IN 1916

John W. Cook, De Kalb, Ill.
W. A. Brandenburg, Oklahoma City, Okla.
Lorenzo D. Harvey, Menomonie, Wis.
Thomas H. Harris, Baton Rouge, La.
Carroll G. Pearse, Milwaukee, Wis.
Calvin N. Kendall, Trenton, N.J.
Ella C. Sullivan, Chicago, Ill.
Randall Spaulding, Montclair, N.J.
George B. Strayer, New York, N.Y.
Estelle Carpenter, San Francisco, Cal.

D. H. Christensen, Salt Lake City, Utah
Payson Smith, Augusta, Me.
James H. Van Sickle, Springfield, Mass.
James A. Barr, Stockton, Cal.
James Y. Joyner, Raleigh, N.C.
Robert J. Aley, Orono, Me.
Charles E. Chadsey, Detroit, Mich.
David Snedden, Boston, Mass.
J. Stanley Brown, Joliet, Ill.
Albert E. Winship, Boston, Mass.

TERMS EXPIRE IN 1917

Frank A. Fitzpatrick, Boston, Mass.
William B. Owen, Chicago, Ill.
*E. Oram Lyte, Millersville, Pa.
James M. Greenwood, Kansas City, Mo.
A. J. Matthews, Tempe, Ariz.
W. T. Carrington, Springfield, Mo.
William P. Burris, Cincinnati, Ohio
J. G. Crabbe, Richmond, Ky.
Margaret E. Schallenberger, San José, Cal.
William E. Wilson, Ellensberg, Wash.

W. J. Kerr, Corvallis, Ore.
Joseph Swain, Swarthmore, Pa.
N. C. Schaeffer, Harrisburg, Pa.
Ben Blewett, St. Louis, Mo.
Z. X. Snyder, Greeley, Colo.
E. E. Bass, Greenville, Miss.
*E. C. Moore, New Haven, Conn.
G. W. A. Luckey, Lincoln, Nebr.
John A. Wood, South Bend, Ind.
D. B. Parkinson, Carbondale, Ill.

*Not present at either meeting of the Council in 1912.

Elected by the Association *Elected by the Council*

TERMS EXPIRE IN 1918

THOMAS A. MOTT, Richmond, Ind.
JOHN H. PHILLIPS, Birmingham, Ala.
FRANCIS G. BLAIR, Springfield, Ill.
JAMES H. BAKER, Boulder, Colo.
ELLEN C. SABIN, Milwaukee, Wis.
CHARLES S. MEEK, Boise, Idaho
EDWARD T. FAIRCHILD, Durham, N.H.
E. E. SCRIBNER, Ishpeming, Mich.
ALBERT A. MURPHREE, Gainesville, Fla.
HELEN C. PUTNAM, Providence, R.I.

ELLA FLAGG YOUNG, Chicago, Ill.
EDWIN S. MONROE, Muskogee, Okla.
W. H. ELSON, Cleveland, Ohio
JOHN W. CARR, Bayonne, N.J.
EDWARD C. ELLIOTT, Madison, Wis.
GRACE C. STRACHAN, Brooklyn, N.Y.
ADELAIDE S. BAYLOR, Indianapolis, Ind.
CARLETON B. GIBSON, Rochester, N.Y.
C. G. SCHULZ, St. Paul, Minn.
OSCAR T. CORSON, Columbus, Ohio

HONORARY MEMBERS

JOHN W. ABERCROMBIE, University, Ala.
JANE ADDAMS, Chicago, Ill.
EDWIN A. ALDERMAN, Charlottesville, Va.
SARAH LOUISE ARNOLD, Boston, Mass.
JAMES B. ASWELL, Natchitoches, La.
BROWN AYRES, Knoxville, Tenn.
THOMAS M. BALLIET, New York, N.Y.
CLIFFORD W. BARNES, Lake Forest, Ill.
EARL BARNES, Philadelphia, Pa.
W. H. BARTHOLOMEW, Louisville, Ky.
ALFRED BAYLISS, Macomb, Ill.
ALEXANDER GRAHAM BELL, Washington, D.C.
D. BEMIS, Spokane, Wash.
IDA C. BENDER, Buffalo, N.Y.
THOMAS W. BICKNELL, Providence, R.I.
ALMA L. BINZEL, Winona, Minn.
RICHARD G. BOONE, Los Angeles, Cal.
DAVID R. BOYD, Norman, Okla.
ALBERT G. BOYDEN, Bridgewater, Mass.
ANNA C. BRACKETT, New York, N.Y.
JOHN E. BRADLEY, Randolph, Mass.
EDWARD BROOKS, Philadelphia, Pa.
ELMER E. BROWN, New York, N.Y.
WILLIAM L. BRYAN, Bloomington, Ind.
MATTHEW H. BUCKHAM, Burlington, Vt.
NICHOLAS MURRAY BUTLER, New York, N.Y.
DAVID N. CAMP, New Britain, Conn.
FRANK B. COOPER, Seattle, Wash.
OSCAR H. COOPER, Abilene, Tex.
WILLIAM J. CORTHELL, Gorham, Me.
E. W. COY, Cincinnati, Ohio
O. J. CRAIG, Missoula, Mont.
EDWIN B. CRAIGHEAD, New Orleans, La.
CHARLES DEGARMO, Ithaca, N.Y.
ROBERT E. DENFELD, Duluth, Minn.
JOHN DEWEY, New York, N.Y.
V. C. DIBBLE, Charleston, S.C.
KATHARINE E. DOPP, Chicago, Ill.
JOHN J. DOYNE, Little Rock, Ark.
ANDREW S. DRAPER, Albany, N.Y.
CHARLES W. ELIOT, Cambridge, Mass.
WILLIAM W. FOLWELL, Minneapolis, Minn.
JAMES A. FOSHAY, Los Angeles, Cal.
JULIUS I. FOUST, Greensboro, N.C.
WILLIAM K. FOWLER, Lincoln, Nebr.
H. B. FRISSELL, Hampton, Va.
R. B. FULTON, Miller School P.O., Va.
CHARLES B. GILBERT, Englewood, N.J.
AARON GOVE, Denver, Colo.
LEWIS C. GREENLEE, Denver, Colo.
JAMES C. GREENOUGH, Westfield, Mass.
MRS. EDWIN C. GRICE, Philadelphia, Pa.
W. N. HAILMANN, Cleveland, Ohio
G. STANLEY HALL, Worcester, Mass.
PAUL H. HANUS, Cambridge, Mass.
WILLIAM E. HATCH, New Bedford, Mass.
CHEESEMAN A. HERRICK, Philadelphia, Pa.
WALTER L. HERVEY, New York, N.Y.
ALBERT ROSS HILL, Columbia, Mo.
J. GEORGE HODGINS, Toronto, Can.
W. M. HOLLOWAY, Tallahassee, Fla.
JAMES H. HOOSE, Los Angeles, Cal.
GEORGE H. HOWISON, Berkeley, Cal.
JAMES L. HUGHES, Toronto, Can.
THOMAS HUNTER, New York, N.Y.
ELLEN HYDE, Farmington, Mass.
EDMUND J. JAMES, Champaign, Ill.
R. L. JONES, Nashville, Tenn.
CHARLES M. JORDAN, Minneapolis, Minn.
E. S. JOYNES, Columbia, S.C.
DAVID L. KIEHLE, Portland, Ore.
WILLIAM F. KING, Mt. Vernon, Iowa
HENRY M. LEIPZIGER, New York, N.Y.
LIVINGSTON C. LORD, Charleston, Ill.
JAMES MACALISTER, Philadelphia, Pa.
JAMES A. MACLEAN, Moscow, Idaho
CHARLES MCKENNY, Ypsilanti, Mich.
CHARLES A. MCMURRAY, De Kalb, Ill.
I. C. MCNEILL, Harrisburg, Pa.
FRANCIS A. MARCH, Easton, Pa.
EDGAR H. MARK, Louisville, Ky.
GEORGE H. MARTIN, West Lynn, Mass.
WILLIAM H. MAXWELL, New York, N.Y.
ESTELLE REEL MEYER, Toppenish, Wash.
JESSE F. MILLSPAUGH, Los Angeles, Cal.
HENRY C. MORRISON, Concord, N.H.
WILLIAM A. MOWRY, Hyde Park, Mass.
MARY E. NICHOLSON, Indianapolis, Ind.
JOHN W. OLSEN, St. Paul, Minn.
JOHN M. ORDWAY, New Orleans, La.
WARREN D. PARKER, Pasadena, Cal.
FRANK E. PARLIN, Cambridge, Mass.
JOHN B. PEASLEE, Cincinnati, Ohio
JOSIAH L. PICKARD, Cupertino, Cal.
EDWARD T. PIERCE, Los Angeles, Cal.
JAMES R. PRESTON, Jackson, Miss.
JOHN T. PRINCE, West Newton, Mass.
GEORGE J. RAMSEY, Danville, Ky.

Mrs. Ellor C. Ripley, Boston, Mass.
H. J. Rogers, Albany, N.Y.
William D. Ruffner, Lexington, Va.
James E. Russell, New York, N.Y.
Henry Sabin, Des Moines, Iowa
J. G. Schurman, Ithaca, N.Y.
H. E. Shepard, Baltimore, Md.
Irwin Shepard, Winona, Minn.
Charles R. Skinner, New York, N.Y.
Anna Tolman Smith, Washington, D.C.
Euler B. Smith, LaGrange, Ga.
James A. Smith, Deland, Fla.
Henry Snyder, Jersey City, N.J.
J. Lancaster Spalding, Peoria, Ill.
Edwin E. Sparks, State College, Pa.
Homer D. Sprague, Newton, Mass.
Lucia Stickney, Cleveland, Ohio
Grace Bibb Sudborough, Omaha, Nebr.
William S. Sutton, Austin, Tex.
John Swett, Martinez, Cal.
A. R. Taylor, Decatur, Ill.
W. R. Thigpen, Savannah, Ga.
John G. Thompson, Fitchburg, Mass.
L. S. Thompson, Jersey City, N.J.
William O. Thompson, Columbus, Ohio
Charles F. Thwing, Cleveland, Ohio
B. W. Torreyson, Little Rock, Ark.
Julia S. Tutwiler, Livingstone, Ala.
Charles C. Van Liew, Moscow, Idaho
Jasper N. Wilkinson, Muskogee, Okla.
Delia L. Williams, Delaware, Ohio
John W. Withers, St. Louis, Mo.
Lightner Witmer, Philadelphia, Pa.
Harry K. Wolfe, Lincoln, Nebr.
L. E. Wolfe, Memphis, Tenn.
Calvin M. Woodward, St. Louis, Mo.

DECEASED MEMBERS

Robert Allen.....1894
Israel W. Andrews.....1888
Joseph Baldwin.....1899
Henry Barnard.....1900
William N. Barringer...1907
Newton Bateman.....1897
William C. Bates.....1909
Reuben S. Bingham.....1902
George P. Brown.....1910
John T. Buchanan.....1908
J. E. Burke.....1910
Norman A. Calkins.....1895
James H. Canfield.....1909
Aaron L. Chapin.....1892
Clara Conway.....1904
J. L. M. Curry.....1902
N. R. H. Dawson.....1895
John W. Dickinson.....1901
Larkin Dunton.....1890
John Eaton.....1906
W. R. Garrett.....1903
Daniel C. Gilman.....1909
Samuel S. Greene.....1883
John M. Gregory.....1898
George T. Fairchild.....1901
Daniel B. Hagar.....1896
R. H. Halsey.....1907
John Hancock.....1891
William R. Harper.....1906
William T. Harris.....1909
William D. Henkle.....1882
Edwin C. Hewitt.....1905
Elnathan E. Higbee.....1889
Frank A. Hill.....1903
Burke A. Hinsdale.....1900
Ira C. Hoitt.....1905
George Howland.....1892
John S. Irwin.....1901
Henry N. James.....1901
H. S. Jones.....1900
Thomas Kirkland.....1898
Albert G. Lane.....1906
Merrick Lyon.....1888
James McCosh.....1894
Charles D. McIver.....1906
Albert P. Marble.....1906
Thomas J. Morgan.....1902
Lemuel Moss.....1905
M. A. Newell.....1893
Birdsey G. Northrup....1898
Theodore B. Noss.....1909
Edward Olney.....1886
Gustavus J. Orr.....1888
Francis W. Parker.....1902
S. S. Parr.....1900
W. H. Payne.....1907
Selim H. Peabody.....1902
William F. Phelps.....1907
John D. Philbrick.....1885
M. S. Cooper Poucher...1900
William B. Powell.....1904
Ellen H. Richards.....1911
Zalmon Richards.....1890
Julia Richman.....1912
Andrew J. Rickoff.....1899
Charles C. Rounds.....1901
Albert Salisbury.....1911
Edward R. Shaw.....1903
William E. Sheldon.....1900
Edgar A. Singer.....1909
James A. Smart.....1900
F. Louis Soldan.....1908
J. W. Stearns.....1909
R. W. Stevenson.....1893
Thomas B. Stockwell....1906
Eli T. Tappan.....1908
Horace S. Tarbell.....1904
Charles O. Thompson....1885
H. S. Thompson.....1904
Arnold Tompkins.....1906
Emerson E. White.....1902
James P. Wickersham....1891
S. G. Williams.....1900
J. Ormond Wilson.....1911

SECRETARY'S MINUTES

ST. LOUIS MEETING

OFFICERS

President—Charles H. Keyes, president of Skidmore School of Arts...Saratoga Springs, N.Y.
Vice-President—William M. Davidson, superintendent of schools.....Washington, D.C.
Secretary—Robert J. Aley, president of the University of Maine.....Orono, Me.

FIRST SESSION—Monday Forenoon, February 26, 1912

Charles H. Keyes, president of Skidmore School of Arts, Saratoga Springs, N.Y., called the meeting to order at 9:40 A.M. in the Banquet Hall of the Southern Hotel, St. Louis, Mo.

This session of the Council was devoted to a conference and discussion on "Economy of Time in Education."

The presentation on behalf of the Committee of the Council was made by James H. Baker, president of the University of Colorado, Boulder, Colo., and James H. Van Sickle, superintendent of schools, Springfield, Mass.

No presentation on behalf of the Committee of the National Association of State Universities was made because of the unavoidable absence from the session of Albert Ross Hill, president of the University of Missouri, Columbia, Mo., and Frank Strong, chancellor of the University of Kansas, Lawrence, Kans., who had been selected to make the report.

The presentation on behalf of the Committee of the Department of Superintendence was made by Harry B. Wilson, superintendent of schools, Decatur, Ill., Frank E. Thompson, professor of education, University of Colorado, Boulder, Colo., and John H. Francis, superintendent of schools, Los Angeles, Cal.

The general discussion was participated in by the following: Joseph Swain, president of Swarthmore College, Swarthmore, Pa.; Robert J. Aley, president of the University of Maine, Orono, Me.; E. Mackey, superintendent of city schools, Trenton, N.J.; J. M. Green, president of the State Normal School, Trenton, N.J.; Francis G. Blair, state superintendent of public instruction, Springfield, Ill.; John W. Cook, president of the State Normal School, De Kalb, Ill.; and L. D. Harvey, president of Stout Institute, Menomonie, Wis.

President Baker, of Boulder, Colo., closed the discussion.

The meeting then adjourned.

SECOND SESSION—MONDAY AFTERNOON, FEBRUARY 26, 1912

The session was called to order at 2:00 P.M.

The topic under discussion was "The Preliminary Report of the Committee on Special High-School Preparation of Candidates for Normal Training-School."

David Felmley, president of the State Normal University, Normal, Ill., made a general statement of the case.

The situation from the viewpoint of superintendents of schools was given by John H. Phillips, superintendent of schools, Birmingham, Ala., and Jacob A. Shawan, superintendent of schools, Columbus, Ohio.

John R. Kirk, president of the State Normal School, Kirksville, Mo., and Homer H. Seerley, president of Iowa State Teachers College, Cedar Falls, Ia., gave the normal-school executive viewpoint.

The view of the high-school principals was presented by J. Stanley Brown, principal of Township High School, Joliet, Ill.

The following people took part in the discussion: Charles H. Chapin, principal of the State Normal School, Montclair, N.J.; D. B. Parkinson, president of the State Normal School, Carbondale, Ill.; and John W. Carr, superintendent of schools, Bayonne, N.J. A brief summary of the case was made by President Felmley.

THIRD SESSION—MONDAY EVENING, FEBRUARY 26, 1912

The meeting was called to order at 8:40 P.M.

At this session, "The Preliminary Report of the Committee on Health Problems in Education" was the subject of discussion.

The scope of the committee's work was presented by the chairman of the committee, Thomas D. Wood, M.D., under the title "Health Problems in Education."

United States commissioner of education, Philander P. Claxton, Washington, D.C., read a paper on "The Need for the Health Ideal in Public Education."

"The School's Responsibility for Providing Healthful Environment and Program" was presented by R. W. Corwin, M.D., Pueblo, Colo.

John F. Keating, superintendent of schools, Pueblo, Colo., and Albert E. Winship, editor, *New England Journal of Education*, Boston, Mass., spoke in the general discussion.

The meeting then adjourned.

FOURTH SESSION—Wednesday Forenoon, February 28, 1912

The meeting was called to order at 9:50 A.M. in the Banquet Hall of the Planters Hotel.

The time of the session was devoted to "The Preliminary Report of the Committee on Rural School Education."

James Y. Joyner, state superintendent of public instruction, Raleigh, N.C., stated that the committee had arranged for E. T. Fairchild, state superintendent of public instruction, Topeka, Kans., to present the general problem. In accordance with this plan, Superintendent Fairchild spoke at length upon this topic.

The general discussion was participated in by Adelaide Steele Baylor, State Deparrment of Education, Indianapolis, Ind.; David Snedden, commissioner of education for Massachusetts, Boston, Mass.; E. C. Elliott, professor of education, University of Wisconsin, Madison, Wis.; E. E. Balcomb, Department of Agricultural Education, State Normal and Industrial College, Greensboro, N.C.; John R. Kirk, president, State Normal School, Kirksville, Mo.; and D. T. Davis, of Decatur, Ill.

The following resolution was introduced and approved:

Resolved, That the National Council of Education recommend to the Committee on Investigations and Appropriations the setting apart of $250 to meet the necessary expenses of the committee from the Department of Superintendence on "Economy of Time in Elementary and Secondary Education."

The meeting then adjourned.

FIFTH SESSION—Thursday Forenoon, February 29, 1912

The Council met in joint session with the Department of Superintendence in the Banquet Hall, Southern Hotel, St. Louis, Mo.

The meeting was called to order by President Keyes at 9:44 A.M.

Payson Smith, state superintendent of public schools, Augusta, Me., presented "The Report of the Committee on Uniform Records and Reports," which is printed as a separate pamphlet.

A special discussion of this report was engaged in by Harlan Updegraff, chief of the Division of School Administration, Bureau of Education, Washington, D.C.; E. C. Warriner, superintendent of schools, Saginaw, Mich.; and W. H. Elson, superintendent of schools, Cleveland, Ohio.

Walter E. Ranger, state commissioner of public schools, Providence, R.I., spoke in the general discussion.

Upon motion of Payson Smith, the report was adopted and the committee discharged.

Dr. Robert Brooks, of Cincinnati, Ohio, who has been chosen as expert by the Committee on Salaries, Tenure, and Pensions of Teachers, was introduced and made a general statement concerning the plans inaugurated by the committee to secure statistics. He requested the co-operation of all superintendents and school officials in securing the material needed by the committee.

The last topic of the session was "By What Standards or Tests Shall the Efficiency of a School or System of Schools Be Measured?" George D. Strayer, professor of educational administration, Columbia University, New York, N.Y., chairman of the committee to investigate this topic, presented the scope and plan of the proposed work.

The rural school phases of the problem were presented by E. C. Elliott, professo of education, University of Wisconsin, Madison, Wis.

The general discussion was opened by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis. He was followed by Charles H. Judd, director of the School of Education, University of Chicago, Chicago, Ill.; Z. X. Snyder, president, Colorado State Teachers College, Greeley, Colo.; and Lotus D. Coffman, State Normal School, Charleston, Ill. President Snyder's paper was read by C. A. Hollingshead, of Gunnison, Colo.

By a unanimous vote of the Council, a recommendation was made to the Committee on Appropriations and Investigations that the Council committee appointed to investigate standards and tests by which schools or school systems may be measured be given an appropriation of $500 to defray necessary expenses incurred.

The Council also recommended to the Committee on Appropriations and Investigations that the request of the Committee on Health Needs of School Children to have an appropriation of $1,600 be favorably considered.

The Council adjourned at 12:10.

ROBERT J. ALEY, *Secretary*

PAPERS AND DISCUSSIONS

TOPIC: ECONOMY OF TIME IN EDUCATION

A

JAMES H. BAKER, PRESIDENT OF THE UNIVERSITY OF COLORADO, BOULDER, COLO.

[*Introductory*]

Mr. President and Members of the Council:

At the request of the president an informal discussion of "Economy of Time in Education" has been arranged for this meeting. There are now three committees at work on this problem: the Council committee and two co-operating committees, that of the National Association of State Universities, and that of the National Department of Superintendence. The Council committee is not ready for a final report, and, altho the delay is already long, I believe the final report should not be hastened, especially since we may now expect vigorous work from the committee of the Department of Superintendence, and, I believe, also from the committee of universities. However, it was believed that an informal conference of the three committees at this time and an open discussion would be an advantage. It was announced that my San Francisco paper on "Reorganization of American Education" should be taken as a kind of report of progress and made the basis of our discussion this morning. I need not read it or repeat its arguments, for copies have been sent to each member of the Council and it appears on p. 94 of the 1911 volume of *Proceedings*. However, it is important to remember that this is not a question of "shortening the college course"; that phrase does not give the significance of the inquiry, which is upon the length of the whole period of general education. The committee does not advocate lowering the standard of American education, or cramming and hurry, or lessening the period for those who early turn to vocations. It aims rather to strengthen scholarship, to edu-

cate without worry or waste, to keep a class of pupils in school longer than is done under present conditions. We believe that by a more economical use of material and methods two years at least can be saved in the whole period of education, including the college, and better results secured than now.

[*Final Summing Up*]

This discussion seems hopeful because on this occasion it has remained within shouting-distance of the subject. I will take time to touch only a few points of the discussion. I agree that we need to study educational aims and educational principles, but we shall be studying them a thousand years from now, and the question of economy of time is somewhat independent of educational aims, and involves principles in method and use of material that would apply in any case. The committee has proposed tentatively a time scheme, based on a rational view of the remedies suggested, in the preliminary investigation, by all classes of educators. Would it not be well for the three committees to center their further investigations upon this scheme and so work with a common understanding and purpose? The time has come to make this question concrete and seek examples and experiments. Remember that economy of time is proposed for those who go thru the whole period of education. It is not intended to shorten the period for those who turn earlier to vocations, but rather to lengthen it by giving them the tools of education at the age of twelve and then offering prevocational courses that will tend to keep them in school longer than they remain under present conditions. The principle of "prolonging infancy" used by one member in this discussion has its merits, but may be applied harmfully. In our whole period of preparatory and university education we prolong the infancy of the pupil until he is approaching his second childhood and in this we differ from every other civilized country. Elsewhere in general the student completes his preparation for the university nominally at eighteen; in this country we prolong university preparation to twenty-two or twenty-three. We must answer the claim that we are at least two years behind other countries at every stage of our education. Reference was made to an illustration of the testimony of the "old fellows" used in my paper on reorganization. This was not harking back to the past, but was used as evidence that there is such a thing as general education, a fact which some inconsequent experimenters and business men turned educational philosophers would attempt to deny. There is danger that our education today may become a thing of shreds and patches. Moreover, anyone studying such a question as is before us must look not only to the present but to the past and the future or he will have no perspective for his judgment. You know what the poets say:

> With large discourse, looking before and after,

and

> We look before and after,
> And pine for what is not.

B

JAMES H. VAN SICKLE, SUPERINTENDENT OF SCHOOLS, SPRINGFIELD, MASS.

[*Abstract*]

It is generally admitted that there is waste in education. It is not denied by a single person among more than one hundred who have been consulted in the course of this inquiry that some of this waste is chargeable to elementary education. There are those who would revolutionize the course of study from beginning to end for all pupils. There are others who would change the course materially for two groups of pupils: the highly gifted and the slow. But a majority of those consulted seem in the main to accept the course of study as it has developed, and to hope for improved conditions thru elimination of nonessentials, substitutions, better teaching, and improved administrative adjustments.

It is clearly impossible to move children thru the course in definite chronological age groups. The differences in mental power are too great for this and we do not yet know enough about psychical age to use this term in speaking of groups of pupils in the various stages of education.

One of the conspicuous causes of waste in elementary education is the attempt to give the same preparation to all, regardless of wide differences in aptitude and the character of the life to be led. Classifying the grades above the sixth as secondary would facilitate differentiation in the upper grades, thus permitting all pupils to make more direct preparation for business or the industries or professional life than is now possible.

We are assuming in this committee that it is possible and desirable to end the college and begin the university at twenty instead of twenty-two, thus saving two years during the whole period of education, and we readily admit the responsibility of the elementary school for a share of this saving, but in accepting twenty as the age at which the college course should be completed, we have in mind the abler students, not all students.

We cannot go far until we can agree upon the essentials of a course of study, and common standards of measurement, for economy of time in education must be relative to the results which we wish to secure.

In determining the essentials of a course of study and adopting measures of accomplishment, there is danger that too narrow a definition of "essentials" will be adopted. Fixed knowledge of fundamental processes is no more and no less essential than mental attitude, habits of thought and emotion, and working ideals. Something more than drill is needed to get these ingrained. The selection of suitable subject-matter for work and study in the grades, the organization of this material with reference to the periods when important instincts, interests, powers, and capacities become prominent, the development of desirable ideals, motives, and habits in the pupils—these things must be considered when we undertake to say what are the "essentials."

Recent studies in retardation have involved the fallacy that the proper place of a child in school can be determined by age alone. What is needed to put education on a scientific basis is an examination of each child's physical state and mental power at the beginning of school life, on the results of which all the work should be based.

We have been accustomed to say, "The teacher is the school," and this is still true, but in our cities with their large buildings and many teachers, individuality is in danger of being submerged and progressiveness of lacking stimulation. Superintendents and supervisors suggest and encourage, but their contacts with teachers are relatively infrequent. Instead of being what they would like to have it, the school will be just about what the principal makes it. In a certain sense, therefore, we are justified in saying, "The principal is the school." The right kind of a principal will weed out poor teachers, will make teachers of uncertain value into good teachers, and good teachers into better teachers. He will know what progress every pupil in the school is making, and, having a view of the whole school as the teachers have not, will be on the lookout for opportunities to advance pupils either individually or in classes without waiting for fixed promotion dates.

In considering waste in education, no problem looms larger than the preliminary and after-training of suitable principals. Given a salary that will enable the superintendent to select persons of tested strength and character for these positions, no effort is expended to better advantage in checking waste than that which the superintendent devotes to conferences with his principals. The principal can either make or mar the most carefully planned scheme and in his hands rests the success or failure of any plans that may be formulated for economizing time in elementary education.

C

H. B. WILSON, SUPERINTENDENT OF SCHOOLS, DECATUR, ILL.

What I shall present this morning is neither a report, a preliminary report, nor a report preliminary to a report. I merely wish to bring to your attention, by means of the outline just distributed, the fact that the committee from the Department of Superintendence has developed this brief logical outline of the whole problem of economy of time in elementary education in an effort to discover where it should begin its work and in what direction it should proceed in an effort to define for itself the phases of the problem which should bring largest returns in the shortest time.

You will recall that this committee was created in response to a resolution presented by Professor Henry Suzzallo at the meeting of the Department of Superintendence at Mobile upon the conclusion of his address before the department, presenting, in the absence of President Baker, chairman of the committee, a preliminary report of the committee from

the Council on "Economy of Time in Education." Near the close of his address Professor Suzzallo said:

> The main requirement at this point in our progress is to investigate the waste in elementary schools and to make definite proposals for eliminating the archaic and least useful matter of the course of study and to propose more ecomomic methods of teaching.
>
> To this end I move that the Department of Superintendence appoint a committee of five on Economy of Time in Elementary Education, this committee of practical superintendents to co-operate with the general committee on Economy of Time in Education.

This committee as originally constituted consisted of Superintendent Calvin N. Kendall, then of Indianapolis, chairman; Superintendent J. H. Francis, Los Angeles; Superintendent E. O. Holland, Louisville; Superintendent Charles S. Meek, Boise, Idaho; and Superintendent Frank E. Spaulding, Newton, Mass. Upon assuming his new duties in New Jersey, Mr. Kendall asked to be relieved from his duty on the committee. After considerable correspondence the present chairman accepted appointment to this vacancy on the committee. Later Superintendent Meek found it necessary to be relieved from duty on the committee, owing to the pressure of other work, and I now announce the resignation of Superintendent Holland for the same reason for which Mr. Meek resigned. Superintendent Meek's position on the committee was filled by the appointment of Professor Frank E. Thompson of the University of Colorado, Boulder, and Superintendent Chadsey, president of the Department of Superintendence, has indicated that he will appoint President O. I. Woodley of the Farmington, W.Va., Normal School to succeed Superintendent Holland on the committee. As now constituted the committee consists of three superintendents, a normal-school president, and a college professor working in the Department of Education. The committee, therefore, represents more lines of interest in reference to this problem than it did as first organized.

At this time we merely present the following outline for your attention and criticism:

ECONOMY OF TIME IN ELEMENTARY EDUCATION

I. Definition (logically first but must be answered last).
   1. Is economy of time to be sought thru lessening the time devoted to elementary-school work? If so, should total time devoted to elementary and high school be lessened?
   2. Or is economy of time to be sought thru securing larger results in the time now consumed?
   3. Or is economy of time to be sought thru a combination of 1 and 2?

II. Lines of investigation in seeking solution.
   1. Course of study problems:
      A. Modifications needed as to content.
         a) Eliminations needed to remove archaic and least useful materials.
         b) Significant additions necessary.
      B. Modifications needed to secure economic amalgamation and wise correlation of subjects. What separate subjects or lines of work should the program of studies provide for?

C. Modifications needed to secure that sequence of work which is essential in socializing and psychologizing the materials of instruction.
D. Modifications needed to secure such differentiations in work as are advisable in upper grades.
E. Modifications needed to secure flexibility in adapting to varying abilities and to different communities.

2. Problems relating to teachers:
A. Giving them an adequate vision as to the function and possibilities of public education in our democracy.
B. Securing efficient, artistic (appreciative, sympathetic) teachers.
C. Perpetuating their academic and professional growth.
D. Preventing wastes resulting from short professional life of teachers.

3. Problems relating to teaching:
A. Securing adequate motivation of children's work (importance of texts in use).
B. Eliminating useless, meaningless, ineffective procedures.
C. Varying the technique of teaching to suit the outcomes or results sought.

4. Problems of organization:
A. What systems of grading and promotion are most advantageous in securing economy of time? (Effects of attendance, preventing failures, avoiding retardation.)
B. Advantages of special schools or classes in securing economy of time.
C. Relation of differentiated courses with reference to vocational ends to problem of economy of time. See D under 1.
D. Relation of vocational guidance to securing economy of time.
E. How may the schools be directed and used in the interest of modifying the public attitude toward educational effort?

5. Development of standards which shall:
A. Set ends for attainment.
B. Enable the measurement of results secured.
C. Need of standards in estimating economy of time.

We hope you will not only react upon this outline here as time may permit, but that you may carry it with you from this meeting and write the committee any suggestions you may have as to the problems of importance for their study and investigation with a view to a future report.

This morning I wish to call attention to the following articles in the outline: II, 1, A, B; II, 3, A, B; II, 4, E; II, 5, A, C. In the light of what I have said in calling your attention to these articles in the outline you will see that it is my belief that the first thing to do is to tabulate rather carefully what is being done at this time in the country which may have suggestive value in indicating ways to economize time. Our first attack should be from the empirical standpoint. The articles under I, while standing logically first in the outline, must be the last ones to be answered from our study. II, 5, standing last in the outline, is probably the first problem which should be solved that we may have a basis for knowing our progress and attainments from the standpoint of economy.

In conclusion I wish to urge you most earnestly to give us your help, refer us to schools that are doing work which may throw light on our problem, refer us to bibliographies which may be of service, use your influence

to promote the discussion of this topic upon educational programs. If all of the educational public which should be interested in this problem will give it the attention due it, after three or four years of careful study your committee should be able to make a report of significant value.

D

FRANK E. THOMPSON, PROFESSOR OF EDUCATION, UNIVERSITY OF COLORADO, BOULDER, COLO.

We cannot proceed far with the discussion of this subject until we have decided upon certain essentials, and we cannot say what is essential in elementary education until we come to some understanding as to what is essential in any education. What is essential will depend upon whether we want to select a few or to train all. If we are selecting it makes little difference what the course of study or the method so long as these are such as to permit the survival of but a few of the best. If we are training, it is incumbent upon us to give the better rather than the worse training. If we are training all—and no less than that is demanded of us—all our educational endeavor must be estimated to a nicety with respect to its effect. If we are selecting a few, the chief consideration is that the work shall be difficult, or require peculiar gifts. Linguistic refinements, tight-rope walking, singing, doing the chores on the farm are all good for the selection of certain types. Our present educational procedure seems to be dominated in a measure by both of these conceptions. Our defense of the traditional cultural education sometimes leads us to emphasize selection; our belief in "practical" education sometimes leads us to "practical" extremes. It would seem that education must hold to a middle course. We must train all in some sort of way but we may make our régime peculiar and difficult enough to select a variety of capacity and genius. Our boast that we "kill off" and frighten away is anomalous if not gruesome. The social order can utilize the peculiar and special contribution of everyone. If we are to educate all, and in the most economical way, we must consider carefully essentials in respect of (1) aim, (2) material, and (3) method.

1. ESSENTIALS OF AIM

Each human being should be, to some extent at least, a participant in each and all of the human occupations. As a child, he should be introduced to each and all of them and should be given opportunity to become at least moderately proficient before the conclusion of elementary education. The educated man is proficient in several of the occupations and, to some extent, at home in all of them. Experience in any occupation should put the learner in touch with the particular truth, beauty, and righteousness which is the perfection of that occupation. To put it another

way, training in the occupations should result in proficiency in them on the higher human levels.

Occupations, as the term is used here, are outgrowths of instinctive activities; they are long-circuited instincts. The instincts are limited in number; they are limited, too, as independent mechanisms, hence much of the confusion as to their number. There are fairly distinct occupations, however, for example, fighting, dodging, mating, protecting, educating, prying, constructing, collecting, strutting. The activities of the instincts in these occupations, and their complications and overlappings, give us the common, human: *habits*, for example, customs, manners, ways in dress, in address, eating, sleeping, exercise, neatness, politeness; *dexterities*, for example, of the body, of speaking, reading, writing, vocation, language, number, drawing; *attitudes*, for example, interests, tastes, enthusiasms, preferences, prejudices, interest in learning, enthusiasm for efficiency, prejudice against dirt-meanness, preference for effort—truth—beauty—justice; *information*, for example, of nature, self, geography (political, social, economic), history, vocations; *ideals*, for example, vocational, moral, civic, scientific, æsthetic, of "paying one's board," being a factor in one's community, knowing and adding to what is known, making things more beautiful. The product of the elementary school should be well advanced toward the attainment of these things. He should be so far advanced that he cannot lose ground; no greater economy could be effected than by this means.

2. ESSENTIALS OF MATERIAL: CHILD AND CURRICULUM

a) The child, for the purposes of education, is a composite of instinct-emotion processes. These processes are the psycho-physical mechanisms built up by the selection of the ages to react effectively to their appropriate stimuli. Primeval man had certain great situations in which to act, certain emergencies to meet. There was no time for deliberation. The man that evolved from primitive man differs from him as an organism in no essential particular. except, perhaps, in greater imitativeness—educability. The modern man is made up of instinct-emotion processes, but he lives under conditions which should train, long-circuit these processes. Man is the descendant of a creature much like man, just like him save that the ancestor lived in a time and environment in which there was no culture. Primitive man plus culture equals civilized man. Civilized man minus culture equals primitive man. A child is, mentally speaking, a primitive man with this difference, however, from the primitive man: that the latter could not get at a culture while the child usually can—if the schools and his parents will keep out of the way! The thing common between the child and the primitive man is this: they are possessed of the same instincts and of the same number of instincts, if not of the same instinct-capacities.

b) The curriculum is usually an abstract and condensation of civilization, logically arranged. Abstraction has been made of the symbol.

Condensation has squeezed out all romance. Logical arrangement has as often as not reversed the psychological order. The present-day curriculum exists, in the main, in textbooks which are condensations of the lore of occupations or divisions of occupations. Condensation has, as intimated above, as a rule, squeezed out all of the things of action—usually of feeling and volition also. Textbooks are, as a rule, highly schematic and, in general, are addressed to the intelligence only. They should be outlines of exercises, actual things for the child to do with his big and little muscles—or suggestions for such—in, and of, the various occupations, arranged as to difficulty in an ascending scale. The earlier exercises should be of fundamental operations; the later, of accessory operations.

3. ESSENTIALS OF METHOD

The child can be educated thru the employment of his activities in the occupations of the race, with care that all his instincts and emotions are involved—none too much, none too little—and that all are involved in right relations to each other and to the "culture" of the group of which he is a member. His incentive to the development of concepts will be his needs. Determine his environment and, by indirection, direct—ability is his natural culmination. We should remember that at first culture was passed along by imitation of action, and that it is still so passed on when we permit. The educand learns thru participation. He later associates symbols (words) with his experience. This helps in communication and it helps in thinking. The crowning mistake in education is made when it is falsely imagined that any considerable part of culture can be passed from one to another, or from one generation to another, solely by means of symbols—words, diagrams, maps. Culture can be passed along in real experience only—by imitation, and by trial and correction. Of course, symbols should be passed over with the experience, for their value in association and thinking. Without the experience, they are practically useless—in time, they are harmful. We learn, by and large, mainly thru imitations of motions. The motions imitated may be the superficial ones—of words and grimace in general—or they may be those peculiar to, or associated with, the instincts and the more fundamental human occupations. Education is the process which gives appropriate activity to each and all of the instinct-emotion processes—always to such extent as really to arouse the emotion. Coincident with this, there will be association of the right symbols, nicely distinguished and graded.

Educational emphasis is wrong: in the schools it is too much on the symbol; in the homes it is weak both on right experience and symbol. The school should attempt to even things up—to correlate all of the child's experience. The teacher must have and keep his perspective. The school should insist upon the *whole* experience—its duty is greater now than ever before. In the good old days, there was a fair division of labor between

home and school. The former gave experience, the latter fitted the symbol thereto. Now we must devise exercises that will provide both experience and symbol, all the way along. These exercises must get down into the child. If the home, the industries, and the school can co-operate, the thing can be done adequately. Probably education will remain but a sorry expedient until this compact is formed, but the right teachers, even under modern conditions, can do a great deal by really calling up such experiences as the child has had. In the country, things are not bad. In the city, they would be better with sane labor laws. School gardens, manual training, cooking, laundering, sewing—any sort of thing rightly used—would help. Textbooks give little more than symbols and the logical organization of them.

The earlier man was in touch with all of this culture and, as this had been produced by his and his immediate neighbor's and ancestor's efforts, he could readily participate in it; with participation, he achieved for himself an education. The present situation as contrasted with the earlier one is obvious. The but-little-sorted accumulation of unnumbered ages and races is all about the one who has still to learn and there are few cues as to what to do next. We have tried to get out of the dilemma by educating that part of the child which has to do with symbols only. Such ideas as he gets, he gets in the old manner, by his experience, and when we teach him symbols he does his best to attach them to some part of this experience; he attaches too much, too little, or the wrong things. We assume that back of the symbols—words, schemes, etc.—taught children, there is the appropriate experience. As a rule, this is not the case. We even, at times, force words and special arrangements of words upon children that they may later have them as receptacles for meaning. We are still crazy on this matter of verbal memory. Adjusting words to experience is instinctive with children; facility is partly a matter of growth, partly a matter of habit. Crowding is fatal—it causes short-circuiting. We are apt to be in a hurry for facility in talking; our most serious mistake is made here. Talking easily becomes a substitute for, an evasion of, action—a "side-stepping." Talking gives a pleasant sense of proximity to reality; it has in it something of imminence; it is prophetic—but it cheats its devotees of experience. Our schools encourage talking, insist on talking, perfect talking until impotence is attained—then we insist that we are not teaching enough grammar.

We will get out of the present dilemma only by bringing education to bear upon the things, the processes, in the educand which endure; and verbal memory processes, alone, do not endure. Taken alone, they are of little use when they do. The things which do endure are the attitudes, the capacities, and the abilities of the fundamental processes—the instincts. These can produce new verbal forms and arrangements. They are doing so when we give them a chance. We might do a great deal for the language

and for literature if we would encourage expression instead of always cramming it into the antique molds. Of course, it is essential that the educand should come to an appreciation of language in respect to all of its functions and especially of its great function, in thinking. There is no more wonderful achievement of man than this speech which permits him to combine his experience in well-nigh unlimited ways; it is important, infinitely important, but its mastery is not attained by our clumsy methods of direct and too early attack.

E

J. H. FRANCIS, SUPERINTENDENT OF SCHOOLS, LOS ANGELES, CAL.

In the interests of economy I am convinced that best results may be obtained by a brief and direct description of what we are attempting to do in Los Angeles in the way of reorganizing our school system.

It is to be understood that the plan is not to be dubbed the Los Angeles plan. I do not know how many other cities are attempting the same things, and with what results. Recently someone mailed me a copy of an address by Edward Van Dyke Robinson, University of Minnesota, on the "Reorganization of the Graded and High Schools." I did not learn who this kindly disposed, but unkind, friend was. Since reading it I am certain that I shall practice plagiarism in this paper and upon future occasions. In fact, I discover that either he or I have been at it in the past, for I might well content myself with calling your attention to his address, which has been published in pamphlet form and which fully covers the points involved in this discussion.

OUR PLAN

The plan toward which we are working in our city, broadly speaking, follows:

1. One or two years in the kindergarten. Our state law compels the admittance of children to the kindergarten at a tender age, a prophecy of the days when the nursery shall become an integral part of the public-school system. This ofttimes results in a child spending more than one year in the kindergarten, and in turn raises serious questions concerning kindergarten methods and content of work.

2. Six years in the elementary schools, assuming responsibility for the physical, mental, and spiritual development of the child between the ages of six and twelve. Because of economic and social conditions, and principally because of the wicked folly of educators hiding behind the gray old fallacy of conservatism, this age limit too frequently reaches thirteen, fourteen, and even fifteen, thereby robbing the individual of the most sacred thing in all the worlds that be—his hidden pride and confidence in the efficiency and power of his own personality. Fortunately the boy, for it is usually a boy, finds some sort of deviltry in which to give expression

to this personality, and thereby retains a portion of it which his good sense may later lead him to turn into legitimate channels.

3. Three years in the intermediate or junior high school, which, if the child has been fortunate, submissive, and not too individualistic, may be completed at the age of fifteen, covering nine years of school work.

4. Five years in the high school, which brings the student to the age of twenty; a good average age to begin the business of life, despite the philosophy of my friend, President Benton, who holds we should remain infants until twenty-one years old.

This general outline of work designed to meet the needs of the largest number of American boys and girls is supplemented by:

1. The trade school admitting pupils according to physical development, irrespective of academic attainments.

2. Continuation schools open before and after school hours, offering work in manual subjects and optional with the pupil. This work we hope soon to enlarge and include in it music, art, mechanical drawing, and public speaking.

3. Vacation schools during the summer months, open in the forenoons and designed to conserve two purposes: (*a*) To occupy the time of the younger children, who would otherwise be on the street, in music, folk dances, play, gardening, natural language work, drawing, and manual arts. Since this is developmental work no effort has as yet been made to fit it into the great regular system. (*b*) To furnish regular academic work for those who wish to make up subjects in which they have failed, or secure the coveted official certificate in subjects yet to be taken before they can be vouched for as educated young men or women. Since this work is both uneducational and undevelopmental, it adjusts itself excellently to the regular scheme and has great advantages as a time-saver and hope-preserver. Many a pupil returns to work in the fall with new hope and courage because he is up with his class and can see the end ahead. It also keeps him out of more unprofitable occupations and saves the city money in carrying him an unwarranted length of time in the school system.

4. Night schools of all grades and for all classes of people. But few phases of our school work have greater significance than this one. Plan and purpose upon the part of the individual, so lamentably lacking in the regular school system, are prominent characteristics here. If this nation has one paramount danger it lies in the number of her school children who are passing thru her schools just to be passing thru, wholly lacking in intelligent or worthy purpose.

5. Special schools for the unsocialized individual who refuses to adjust himself to the regulations, formalities, and conventionalities of the schoolroom. These are the eddies with which the driftwood of the school system may be gathered and treated until sufficiently seasoned to again risk in the great educational current. They are necessary and strikingly convenient.

6. A liberal use of the ungraded room, which indicates a tardy recognition of the fact that, since children will differ in some essential points, it is folly to subject them all to the same educational treatment and expect them to assimilate all the ingredients with equal facility and profit.

7. The social center, not yet a year old, but a most promising educational youngster. Similarity of this to the German plan is to be frankly conceded, which leaves a beautiful opening for the American patriot to orate on the virtues of the American and defects of the German systems. The German system, however, is not to be adopted for our needs, but adapted to them. There must remain one fundamental, vital difference between the present German system and the future American plan: the latter must have no blind alleys, and her educational cross-roads joining the main highways must be kept in as good condition as the highways themselves. This becomes quite possible with the assumption that the coming generation of American educators will cease to be frightened at the imaginary chasms between these highways, and discover that a good traveler who has moved on his own steam upon one will need fear no great hardships or difficulty in traveling on any other. This also suggests another significant difference: American vocational schools can no more afford to sacrifice liberalizing studies than can academic schools afford to eliminate constructive and applied work.

From the topic printed on the program for today, this paper should concern itself principally with that part of the school system including grades seven, eight, nine, and the organization known as the intermediate or junior high school. At present we have five such, enrolling approximately 3,000 pupils. Four of these are five months old and one can boast a year of experience. Three uniform courses are offered in each of them: a general course, a commercial course, and an elementary industrial course.

These courses are planned with two classes of pupils in mind: (*a*) those intending to enter high school, and (*b*) those electing to leave school at the end of their ninth year. Both are given full tenth-year standing in the high school.

In attempting to plan the work for these two classes we also try to keep in mind the individual, independent of what he intends to do, or where to go. This, of course, is the age-old problem and the fundamentally important one, likewise the one most poorly solved.

In the seventh year one option, and in the eighth and ninth years two options, are allowed out of a group of six or seven studies.

For the pupil going thru the intermediate school we expect to accomplish the following:

1. An ability upon his part to do some thinking that may be more or less his own, probably less. We concede that this is ambitious, and we may have to be content with limited results. A very little, however, would be refreshing and give hope. Doubtless American boys surpass

those of all other civilized countries in their willingness and ability to do things, and in their unwillingness and incapacity to think logically, consecutively, and deeply. In this latter the American boy is surpassed only, if at all, by the American girl, with honors close. The cause is easily discovered. The system, not the children, is at fault. We have been asking the pupil to recite what he has just read from the pages of a textbook that should never have been published, and never would have been, save for the money there was in it. The lesson begins on page 10 and ends on page 12, and except for these pages it begins nowhere and ends at the same place. Since the pupil's passing thru the grade, rather than passing the grade thru the pupil, is the thing to be desired by him, and too often by the teacher, principal, and superintendent, and since this is accomplished thru satisfactory recitations, the recitation in turn becomes the important activity of the average schoolroom. Thinking is of minor consideration. The time, energy, and life wasted in recitations in the American schoolroom would serve as the comedy of the ages were it not the tragedy. It might be legitimately asked how the intermediate school could improve upon the grade school in leading pupils to think. The reply must be qualified, but a specialist, or semi-specialist, who is supposed to think more deeply on his specialty, must be conceded to be better prepared to lead his pupils to do the same.

2. It accustoms the pupil to departmental work, and hence prepares him for high-school methods. The death-rate in our ninth year, or first year of high school, is alarming. This again is easily accounted for. The pupil who has enjoyed the maternal care of a conscientious teacher, who knows his strong and weak points, and is in turn equally well known by him, finds himself lost in a great high school with no one to look after him, tell him when to get his lessons, and how to conduct himself. The change is too violent and too sudden. He fails, becomes discouraged, and drops out. Our experiment so far has resulted in 18 per cent in the ninth year of the intermediate schools failing in one or more subjects, as against 42 per cent in the same grade in our high schools.

Not only does the pupil become accustomed to departmental work, but he has the advantages of it. These are incomparably great, compared with the old plan of one teacher for the entire curriculum. The idea of a mother-teacher belongs to preadolescence and is suited to children. Adolescent boys and girls are entitled to learn from those who are masters of what they teach. This is impossible when one person is required to teach arithmetic, geography, history, literature, language, science, penmanship, music, art, ethics, hygiene, agriculture, needlework, etc., the etc. to include those subjects which may have escaped my memory. Specialists and specialization offer serious problems in education, but they are not hopeless ones, as are those presented by the unprepared teacher. Teachers are not at fault. They are the victims of a system that demands the

impossible of them. Nor can departmental work be brought to its highest efficiency under regular grade-school conditions. On account of lack of numbers of equal grade, diversity of interests running thru so many grades, intricacies of programs, and ideals of principals and teachers, departmental work in the grade schools meets with unnecessary difficulties.

3. It conserves his time and interest. Six years is sufficiently long to give to the mastery of the arts. The last two years of grade schools naturally occupy themselves with repetition and dead matter. An attempt has been made to enrich these years by the introduction of new material. The result has been an educational hash that has in it too many of the elements of failure. The number of young souls lost thru lack of interest in work that is a repetition, or work superficially done, is a startling commentary on the wisdom of school men and women. The adolescent youth begins to inquire, reason, and judge, and he must have material upon which these qualities of mind may work.

Of all the inexcusable follies to be chalked against us as teachers, possibly that of compelling the child to repeat the work of an entire grade, because of failure in one or more subjects, is the most glaring. It is possible to avoid this in the grade schools, but inconvenient. This inconvenience, while not conceded, is yet the dominant cause for the practice. In the intermediate school it disappears naturally and necessarily.

I do not hesitate in the belief that under a well-organized system of intermediate schools the child will leave the school one year ahead, in development, possession of knowledge, and the power to acquire it, of the pupil of the same grade under the present plan. This is an extremely conservative statement of my hope and belief.

4. It offers to him organization and equipment not possible under the grade plan.

5. It should develop in him social- and self-responsibility at an age when responsibility to society and to himself becomes most important. The theory that the older and stronger pupils of the school are to look after the interests of the younger and weaker ones is beautiful. It has one serious defect: it does not work. Facts are, the farther our school children progress in the system the less are they disposed to concern themselves with the interests of anyone other than themselves, or their friends, and we are sending out armies of boys and girls, men and women, possessed of the spirit of getting what they can and giving as little as possible in return—the spirit that in social, political, and economic life is a menace to the nation.

These schools should develop student government and other student activities offering opportunities and encouragement for giving of self to a legitimate and worthy cause.

Too much is being attempted for the child, too little by him. Too many safeguards, restraints, too much protection, advice, and guidance

will not produce a race of men and women with the mettle of our fathers and mothers. They developed the real stuff within them thru early sharing the responsibilities of life and playing their part in the game. Somewhere below the university and below the high school we must lead the individual to recognition of the fact that the world owes him just what he is worth to the world, and he owes himself just what he is worth to himself. This belongs to the period of adolescence, and is very difficult effectually to develop in a school where the preadolescent child so far outnumbers the adolescent. Our grade schools are usually dominated by either the atmosphere of the child world or the world of men and women. It is a rare corps of teachers with a rare principal at the head of a school who succeed in harmoniously blending the two worlds. Much of the lack of interest in and dissatisfaction with his school, and most of the bluff, bluster, and blow of the average eighth-grade boy is due to his environment, which is not in harmony with his nature, and the average eighth-grade girl is equally affected, but in somewhat different form.

6. The intermediate school offers opportunity to secure men teachers for seventh- and eighth-grade pupils. As this convention is composed largely of the male contingent I leave it to you to pass upon the merits of the proposition. It should be noted also that the plan does not exclude women teachers, and while teaching is not a sex problem it will be conceded that as long as men and women differ widely in their experiences, the adolescent mind should come in contact with both the masculine and feminine attitude of mind and viewpoint of life, if the child is to keep his mental balance.

7. The intermediate school concerns itself with the child not going to high school. The American high school has grown within the last decade to become the greatest educational institution in the world, largely because it was compelled to concern itself with the interests of the pupil not going to college. He was the more important because there were more of him.

The intermediate school in the coming decade will be doing for the boy and girl not going to high school what the high school is now doing for the boy and girl not going to college, when it will surpass the high school in importance for the same reason. The base of society always has been, and always will be, more important than the apex, for the simple reason that it acts as a support to the apex. This, be it understood, however, is not its only or main function.

The high schools, in their efforts to care for the boy and girl not going to college, have increased the number of college students manyfold. So will the intermediate schools increase high-school enrollments. The colleges are coming to recognize that the high-school pupil who has prepared well to leave school at the end of his course is well prepared to continue work in college; so will the high schools discover that the intermediate

pupil who has taken greatest interest in, and given most thought to, his work in the intermediate school is best prepared to do work in the high school. The kind of work is of minor importance, compared with the quality.

But someone will raise the inquiry here of what can be done for the child in the seventh, eighth, and ninth years to prepare him to leave school. The reply is, anything the teacher and system are prepared to do. The limitations are not in the pupil, but in the system and teachers anticipating the opposition of the psychologist, who with all his wisdom has failed to discover the psychological, physiological, and sociological necessity for reorganizing a school system that violated the laws of each of these sciences.

I call attention to the growth of education during the last quarter of a century, in which time we have witnessed the high schools advancing far beyond what the colleges were then doing, and the colleges occupying fields then unthought of. The grade schools in music and art have outrun the dreams of university enthusiasts of a quarter of a century ago, if there were any at that time. To say that we have reached the limit of the child's capacity is to indulge in academic twaddle. We may be reaching the end, but which end?

8. The intermediate school should help the child to find himself. Possibly no greater service can be rendered him by the public schools. Certain it is that too few do find themselves in their school days and too many who do, do so too late to take advantage of all or much the schools have to offer them. The belief that a young person is not prepared to decide upon a vocation until he has finished college is dangerous and wasteful. The young people of this country must know earlier what they are to do in life; whether they do it or not is of minor importance compared with what they become in preparing to do it.

A system of education that is worthy the time, effort, and money spent on the American schools should be one of widest possible opportunities and offer greatest temptations to young people to discover their best qualities and powers. It should also enforce the necessity of using these qualities and powers in serving mankind. Vocational advisers may be necessary and helpful, but vocational subjects properly presented offer a safer guide to young people in making a choice. This can be offered with only limited success in the grade schools; the intermediate schools furnish excellent opportunities for their introduction.

The intermediate school has distinct advantages over the six-year high school, which begins with the seventh grade. This is especially true in the larger cities. In some of the smaller districts where, as in southern California, they are erecting expensive high-school buildings to accommodate a small number of pupils, it would seem best to admit the seventh and eighth grades to the high school.

In the cities, however, the high schools are usually crowded and almost uniformly too large in numbers.

The transition from grade to departmental work should be gradual; to make it so is one of the distinct problems of the intermediate school, where it can be better worked out than in a large high school with its own and different problems. The high schools have not solved the transition problem between the eighth and ninth years. To make the break as violent between the sixth and seventh as it now is in the ninth would add to our difficulties.

Seventh- and eighth-grade pupils are too old to associate in school with first- and second-year children, but too young and inexperienced to work on an equal footing with eleventh- and twelfth-year pupils.

In most states children are compelled by law to remain in school between the ages of six and fifteen, inclusive. A school, therefore, that naturally completes its work with the child at this age is logical. Its business will be to solve the problems raised by pupils of these grades and to meet their needs. Thus it can and will do better than the present high school.

The item of transportation to high-school centers is an important one and the unnecessary dangers to which young people are subjected in our large cities argue strongly for the organization of intermediate schools within walking-distance of practically all pupils.

To include the ninth year in the intermediate insures an additional year's schooling for a very large percentage of pupils, who will remain to finish with their class but who would drop out of a six-year high school upon reaching the legal age.

The three divisions of the school system are psychological, sociological, and logical. The intermediate school, however, assumes its true significance only when considered in connection with the extended high school.

Six years in the elementary schools, three years in the intermediate, and five years in the high schools offer opportunities that will work a revolution in our educational history. Six years will be given to the mastery of the arts, the remaining eight to the development of men and women and their preparation for Junior work in college or for definite activities in life. Then will conservation in school work lose much of its significance and the American system of education be truly for neither the rich nor the poor but for the American boy and girl.

The cost of education under this plan will be increased, but the true educator concerns himself much less with the cost than with the returns of education, and these will be greatly multiplied over present returns.

DISCUSSION

JOSEPH SWAIN, president of Swarthmore College, Swarthmore, Pa., spoke from the standpoint of one who believes that economy of time in education will necessarily be worked out chiefly thru the experiences of teachers in the different fields of education. The teachers in the grades will have largely to determine what can be done in the grades, the high-school teachers what can be done in the high schools, and the college teachers

what can be done in college. He expressed his willingness to accept as entrance subjects to college the subjects which the high-school teachers find best for each individual student. If each pupil pursues in each grade what is best for him there, and if the work is done in such a thoro manner as to enable the teacher in the grade above to build his instruction on the work done in the grade below, then the teacher in one grade should determine the fitness of the pupil for promotion to the grade above, whether it be within the school or from school to college.

Dr. Swain commended, in the main, the paper of President Baker, read at San Francisco, on the economy of time. He was satisfied with the provisional time scheme presented as an ideal toward which to work, namely, elementary education from six to twelve years; secondary, from twelve to sixteen years, and college, from sixteen to twenty. The reduction of the number of grades from eight to six may take many years. There are many schools, however, where the reduction from eight to seven grades has been very successfully tried. If time and experience can justify six grades instead of seven, the two years' saving of time would be secured.

Dr. Swain pointed out that the often-reiterated statement of the German schools saving two years in time as compared with the American schools is not strictly true, and would be irrelevant if true. We would not bring to America the German *Gymnasium* if we could. It is military in character and admirably suited to German civilization, but its spirit is not suited to American ideals. Besides, the German students do not finish their courses in the *Gymnasium* at eighteen years of age, as it is usually understood, but at the age of about nineteen and a half years. Dr. Swain visited a number of such schools in Berlin last winter and found the average age of the graduates in these schools to be about nineteen and a half years. He quoted Dr. Russell of Teachers College, New York, who found that the average age of the graduates of these schools in Germany was between nineteen and twenty years. As a graduate of the German *Gymnasium* has about the equivalent in training of an American student who has completed the Sophomore year, the American student at a corresponding stage of advancement is not two years older but one, and where the eighth grade is eliminated, he is no older. The graduate of the German *Gymnasium* is far inferior in physical development to the boy who has had two years in college. Dr. Swain was not prepared to indorse the idea that on the whole the German *Gymnasium* graduate is better fitted for his subsequent studies and career than the American boy is for his. He was inclined to the opinion that the German boy in his system of studies at nineteen and a half years of age is not better fitted for his subsequent work than the American boy is at the same age for his subsequent work. The German boy has lost in physical development as much as he has gained in intellectual development.

Dr. Swain believes that the independent college must maintain a four-year course. If its work is based on six years of secondary training, then the last two years must be conducted on the university plan, as pointed out by President Baker. The stronger colleges can well do this. Our best colleges can adjust themselves to either four years of secondary courses or six years of secondary courses. Evolution in education must determine what is best. Certainly the college must never lose sight of the fact that the first duty of the college is to make men and women of high ideals and not make them slaves of the civilization in which they live.

James M. Green, principal of the New Jersey State Normal School, Trenton, N.J.—President Patton of Princeton University in an address at the installation of Dr. Butler as president of Columbia University said that Dr. Butler was fortunate in that he began with a philosophy of education. We are uncertain in this discussion because we have no philosophy, no definite plan of education before us. "We don't know where we're going, but we're on our way."

How can we discuss intelligently economy of time unless we define a specific thing to be accomplished and the length of time it takes to accomplish it under given circumstances?

The term education is too general, it means too much. It seems to me that we should do better to discuss economy in the terms of the curriculum; for instance, what of geometry or physics, general and special, should we teach in the schools, and how long will each require?

The Association of Colleges and Preparatory Schools for the Middle States and Maryland in their meeting of 1910 set for discussion two phases of each of several subjects, the practical and the cultural; for instance, what of algebra is essential to engineering and astronomical problems and what is simply taught for disciplinary purposes? It appeared that there was a wide difference between the amount of algebra used for one of these purposes and the amount used for the other. The technical school men were entirely satisfied with so much of the subject as would solve their problems, while the general school or college men wanted a larger amount purely for discipline.

Every principal knows how large are the claims of each specialist for his department. The teacher of penmanship wants to secure not only good letter forms but the relation of good penmanship to the development of good English; the teacher of English not only wants to secure good forms of expression, but wants to review all causes of expression. He is unwilling to recognize the fact that the correct expression of a problem in physics is an exercise in English. Indeed each specialist is disposed to charge himself with the whole of education rather than to confine himself to that which is peculiar to his subject. In this way we merge and overlap very much in our efforts. Whether we do our Latin in the college or university does not seem so important as how much Latin should we do and how best do it. We need to distinguish between essentials and incidentals.

PRELIMINARY REPORT OF COMMITTEE ON SPECIAL HIGH-SCHOOL PREPARATION OF CANDIDATES FOR NORMAL-SCHOOL TRAINING

DAVID FELMLEY, PRESIDENT OF STATE NORMAL UNIVERSITY, NORMAL, ILL.

In preparing this report your committee sent letters of inquiry to 120 state normal schools. Some of the questions asked could not be answered accurately without considerable investigation. Others could hardly admit of precise answers in any case. Possibly for these reasons replies were received from only thirty-eight normal schools. Yet these replies came from twenty-five states representing every section of the country and present a body of fact and opinion sufficiently uniform to justify, I believe, the main conclusions presented in this report.

It appears that thruout the country normal-school faculties are generally not satisfied with the quality of the high-school preparation received by normal-school students. The work of some high schools is entirely satisfactory; many individual students from other schools show excellent preparation. Our conclusions are necessarily based upon the average product. There is no disposition to indulge in wholesale condemnation of the high schools. Their principals and teachers must often bow to conditions that they cannot control. We propose merely to analyze the high-school situation from the standpoint of the normal school, and to suggest such changes as seem desirable and practicable.

The character of the instruction is almost everywhere dominated by college traditions and ideals. The high-school teachers are nearly always college graduates, usually young college graduates with no professional education, no adequate comprehension of the meaning of education, of the purpose of the school, or of the physical and psychological laws that must govern all learning and teaching. To such teachers "to get an education" is to complete a college course, and the function of the high school to fit boys and girls for college. Naturally they imitate their own teachers and bring the methods of college and university into the high-school classrooms, diluting them to suit young students and lecturing much. Hence the instruction is scholastic, bookish, abstract, with little articulation with the environment or reference to the needs of modern life.

THE CAUSE

Hence it appears that the fundamental cause of the defective preparation of our students is in the conscious aim of the high school. So long as this aim is to stay on the accredited list of the university, the best teachers will be secured for the subjects that find grace in the sight of the university visitor. In many high schools this dominating ideal determines the subjects in the curriculum and controls the work done in every one of them. This control is in the direction of further work in these branches in higher institutions of learning rather than in the clear comprehension of them as related to the students' life and social environment. Hence it follows that

> the best energies of thousands of our young people are devoted to studying the language, the literature, the wars, the politics, the religion, the customs, and the superstitions of peoples for fifteen centuries dead, while the knowledge that is needed to earn a living, to discharge the duties of citizenship, and even to appreciate the world in which we live must be picked up largely outside of school and by methods more or less irregular and ineffective.

This conscious aim of the high school determines the choice of teachers. If the one function of the high school is to fit for college, what more sensible than to secure as teachers men and women who have been thru college and know what preparation will be needed? In this way the circle is closed and the intrusion of foreign elements effectually prevented. Organizations of colleges and secondary schools have been formed in which the conditions of membership require the college to accept the high-school graduates as students, the high school to accept the college output exclusively as teachers. It is notorious that the significant advances in science and the arts have not been made by men within college walls. The greatest teachers of men have often owed little to the schools. May it not be well to make some sort of provision by which the Franklins, the Faradays, and the Edisons of the educational world may bring their ministry to the high school?

A third evil result of this ideal is a tendency in the organization of the high school to depreciate all student activities that do not directly fit

for college. The high-school program provides for each student four solid studies that count as units in college entrance. Music, drawing, the arts and crafts, domestic science and domestic art, commercial branches, and other subjects of high practical value are belittled as unworthy the attention of capable, high-minded, and ambitious young people who have the capacity and spirit to undertake arduous things. While debating societies, literary clubs, musical organizations, and other voluntary student activities may be tolerated or even encouraged as a means of holding the students in school that they may pursue the real studies, the high educational value of these organizations is disparaged or ignored. Every teacher can recall young people who while in the grammar school made a good start in a musical education, but after entering the high school found it necessary to abandon their music in order to keep pace with their classes. To choose otherwise was to fail of graduation. So frequent is it for persons of eminent musical ability and accomplishments to drop out of the high school that it is frequently assumed that conspicuous talent for music is evidence of deficient intellectual power.

THE REMEDY

The first need of the high school is a change of aim. It must front the actual needs of life as found in shop and store, in farm and home. This does not mean that all instruction shall be vocational; the physical, social, and cultural needs of men and women are facts of life. But it does mean that we must assess the actual educational value of every study in the curriculum, of every detail of organization and method, and conduct our schools in such a way as to secure the maximum of useful knowledge, skill, power, appreciation, and character. To make such an assessment of values is no easy matter. We lack a universally accepted standard. We are likely to be misled by prejudice, by habit, by traditional doctrines of formal discipline, intangible and unprovable.

Then our organization must be in close articulation with the total environment of the student. Thus if the high school does not offer instruction in instrumental music, it must find a way to supervise and credit private instruction and count it for graduation. If the student of domestic science has regular home duties in this field for which the school instruction affords direction, some means should be found for rating the excellence of the performance and crediting the same in the high school. The school must not set itself up as the one institution that shall bend everything else to its calendar and needs.

Such a change of conscious aim is not easy to bring to pass. The university looms large above the horizon of the country town. If the rival village ten miles away has had its high school accredited, we cannot afford to live in manifest inferiority. Our school board scurries about, telegraphs for the university high-school visitor, and begs him to name the terms on which the coveted relation may be secured.

In every country town there are a few influential citizens of the well-to-do or professional classes who wish to prepare their children for college. Disliking to send their boys and girls away to boarding-schools, they bring all possible pressure upon the school board to place their high school on the accredited list.

It is not easy for a school board to resist this pressure even tho itself holding a rational view of the function of the high school. For these and other reasons, the smaller high school (and it is from the smaller high schools that most normal-school students come) is obliged to shape its program and organize its work with reference to college standards.

The second need of the high school is a change in the curriculum—not merely in the interests of future teachers but of all the students. In the small high school where but one course is taught it should not be the course prevailing at present. If the best single course is arrived at, it will not be a poor course for future teachers. In the large high school where many courses are provided for varying tastes and vocational needs, certain studies may properly be recommended to all who look forward to the vocation of teaching. It is by no means necessary or even desirable that all elementary teachers should have had the same high-school course—no more than that all the sixth-grade teachers in a city should be of the same relative ability in the various branches taught. The school system is all the richer because of the individual talents of each. Nevertheless, as appears below, there are certain arts and knowledges of high importance to all elementary teachers for which an adequate foundation should be laid in the high school. All intending to become elementary teachers should include them in their high-school course.

The question arises: Do high-school students decide to become teachers early enough to affect their choice of studies? The general opinion is that they do not, but I am not sure that this opinion is in many cases based on actual investigation. In one large normal school twenty-three of the twenty-six women of the faculty had decided to become teachers before they were sixteen. A majority of the students in the same institution had decided at that age. In another state normal school all the high-school graduates were polled with this result:

37 per cent decided to become teachers before entering the high school.
4 per cent during their first year.
4 per cent during their second year.
14 per cent during their third year.
22 per cent during their Senior year.
19 per cent after graduation.

Of twenty-seven women in the faculty of this school, eight had decided to become teachers before they were ten, nine others before they were sixteen. Of the twenty-three men in the same faculty, ten had decided before they were sixteen.

From this it appears that by the middle of the high-school course enough students have chosen to become teachers to make it worth while to offer any needed courses. This number may be largely increased if high-school teachers take a lively interest in the future of their students. An observant teacher cannot fail to note among his pupils those who have a marked fitness for teaching. A word of suggestion or encouragement at the right time will often decide the matter. It ought to be somebody's business to advise young people as to what they shall do after leaving school—somebody's who knows the young people and knows the world. A wise teacher often can do this better than the parents themselves.

From the reports received it appears that the high-school curriculum thruout the country contains substantially the same elements, but varies somewhat in the relative time devoted to the different branches of study. The standard graduation requirements are usually sixteen units, each unit being a year's work in a subject with daily recitations. An approximate composite of the various programs actually completed by the high-school graduates in the normal schools reporting is as follows:

English including grammar, rhetoric and composition, English literature, reading and public speaking	3.8 units
Foreign languages—Latin, Greek, German, French, and Spanish	3.4 units
Social science—history, economics, civil governme	2.6 units
Mathematics—algebra, geometry, trigonometry, and arithmetic	2.0 units
Physical science—physics and chemistry	1.2 units
Biological science—zoölogy, botany, and human physiology	.8 unit
Earth science—geography, physiography, geology, astronomy	.6 unit
Music—vocal or instrumental	.2 unit
Drawing—design, manual training	.3 unit
Agriculture and household science	.1 unit

In the East foreign language has a larger place, often constituting a full third of the curriculum. In the South the ancient languages and mathematics receive largest relative attention. In the Middle West and also in the Mountain and Pacific states larger attention is paid to the biological sciences. Drawing and design seem best developed in New England; agriculture and the household arts are just beginning to appear in ratable amount in the high-school curriculum of a few students.

The normal-school faculties reporting are pretty well agreed that for future elementary teachers there should be less foreign language, less algebra and geometry, more arithmetic, more biological science, more geography, more of drawing and the other manual arts, more music, reading, and public speaking than we ordinarily find in the high-school course. Our students before completing the normal-school program are usually of the same opinion.

In an Illinois normal school 162 students, all high-school graduates, were recently asked how many would change their high-school courses if the course was to be begun with their present estimate of educational values.

Fifty-six per cent (mostly Seniors) would change the course. Forty-four per cent (mostly Juniors) would not. Forty-five per cent would take less Latin, 11 per cent less German, 18 per cent less mathematics; while 39 per cent would take more natural science.

The following course is suggested:

Three years' work in English.
Four years' work in science.
Two years' work in mathematics.
Two years' work in history and civics.
Two years' work in German or French.
Two years' work in industrial lines.
One year's work in music and drawing.

The third need of the high school from the standpoint of the normal school is that the instruction in the various branches be more thoro and more vital. There is a general complaint that high-school students are poorly taught, that they cover too much ground with little drill and real assimilation; that they have low ideals as to what thoroness and accuracy mean in the preparation of lessons; that their work is largely memorizing things they do not understand and soon forget; that they do not know how to study; that they are poor in vocabularies and seem to lack words to express ideas with which they must be perfectly familiar. The fundamental difficulty seems to be, as pointed out before, that their high-school study is largely a thing apart from their daily life experience. They do not properly comprehend, appreciate, or assimilate the material they deal with. Thus English is the medium of instruction. Habits in the use of English are forming in every classroom. Hence if students are to use the English language effectively with correct idiom and pronunciation, it will be brought to pass most economically, not by adding more courses in English, but by paying due attention to these points in all classes. Every effort made to secure precise and orderly thinking not only aids in the knowledge of the particular branch, but makes for better English as well. The inverse statement is equally true. Every teacher should be consciously a teacher of English.

Teachers especially need to be good readers, they must speak with ease and effectiveness, and in pleasing tones. They should have read widely in literature, largely in children's literature, and have committed thousands of lines to memory. The normal course is altogether too short for this accomplishment. It should have begun in the lower grades, and have continued all thru the years of the high school.

The sciences should be so taught that the student will feel every day that his health, his happiness, and his success in life depend upon the truths they contain. They should explain natural phenomena, and industrial processes, fuels, foods, sanitation, and the rules of right living. Altho the sciences came into our high-school and college programs largely as a

protest against the old classical education with its emphasis upon formal discipline, its dependence on authority, we have gradually come to teach them as if their chief value lay in their method, in experiments to rediscover what the student knows in advance, in the verification of physical constants, and in the solution of endless problems in energy and motion. Biology should deal more with the visible forms that surround the student and which should appeal to him every day, rather than with the microscopic world.

The mathematics of the high school needs thoro revision. No other branch is so universally studied as algebra and with so little profit. The time devoted to it should be reduced to one year, its topics limited to those that generalize and extend arithmetical processes. For the ordinary elementary teacher imaginary roots are as incomprehensible and useless as the fourth dimension. The work should abound in concrete problems. Investigations that do not begin in concrete problems and end in concrete applications should be omitted. A year of plane geometry, with many practical arithmetical problems involving geometrical elements, should suffice in this branch.

History should undertake to answer this question: How did our present institutions come to be as they are? Only in so far as they answer this are events or the lives of men worth knowing. Civics is a study of rights and duties in society. It deals with the co-operative efforts of men in the state to secure justice, protection, healthful conditions, education, and sundry other things of everyday value. It should emphasize function rather than structure and machinery. No study in the curriculum is of higher value than economics. Without it the organization of modern industry cannot be understood or rightly adjusted. But to be of value it must be taught in terms of the student's environment.

Where the normal-school course is only two years in length, it is best in the high school to omit foreign language altogether and include in the last two years a study of the common branches—not a review in the sense of going over grammar-school textbooks, but a fresh study of these subjects from a higher standpoint, a study that will enlist the best energies of advanced students. A year of physical and commercial geography will set forth the conditions and purpose of human industry. Grammar is rarely appreciated by the fourteen-year-old. It really belongs in the Senior year of the high school.

The fourth need of the high school is a different standard of preparation for its teachers. Our students usually come from the smaller high schools where salaries are low. Most of the teachers there are young women recently graduated from college. Few of them have had any professional training of any sort. Those who are successful remain but a short time. Consequently our high schools are taught by a shifting corps of young, inexperienced, and untrained teachers.

Thirty years ago mature and scholarly teachers who had served an

apprenticeship in the grades were frequently promoted to the high school. They brought with them a knowledge of children, thoro familiarity with the common branches even in their higher reaches, skill in teaching. To teach the younger classes in the high school such teachers are needed today. Instead of this we find college-bred young women usually quite inexperienced and with little definite knowledge of what goes on in the grammar school. The break between the grammar school and the high school is too pronounced. The pupil finds a new organization, new branches of study, new teachers with new methods of instruction. Teachers and pupils share in a mutual misunderstanding. There is a good deal of superstition in the reverence paid to degrees. A degree is not a sacrament. It is not the outward and visible sign of an invisible and inward spiritual grace. Many teachers of slender school advantages have, thru private study, reached a finer and truer scholarship than is attained by the great majority of graduates of our colleges and universities.

All high-school teachers need as thoro professional preparation as elementary-school teachers. They need the same knowledge of the laws of the developing life of children and youth, of the psychological processes involved in all learning, of the principles and methods of teaching and school management, of educational aims, of the relation of the school to other social institutions. Many superintendents testify to the fact that whereas elementary teachers usually enter heartily into the work of reading circles, teachers' meetings, and other means of professional growth, high-school teachers stand aloof. They will co-operate in literary clubs and scientific societies, but they do not seem to realize the existence of a great body of doctrine that informs and illumines the teaching art. They are thoroly committed to the dogma, so widely prevalent in university circles, that anyone who knows a subject can teach it.

We therefore hold that, in selecting high-school teachers, school authorities should give due weight to professional education and training as well as to character and scholarship, and that teachers of extended experience, acknowledged skill, and ample scholarship gained thru private study should not be excluded from the high school because of the lack of a degree.

Altho this report has set forth what your committee believes to be certain shortcomings of many high schools, it must not be inferred that we hold the high school chiefly responsible for poor work done by graduates of normal schools. These institutions need to examine their own organization, curricula, faculty, and methods. They are not wholly emancipated from scholastic ideals and bookish methods. Their teachers are often chosen because of their degrees rather than because of their personal power and skill in the classroom. Often these teachers have had no real professional training; their experience as teachers before obtaining their Doctor's degree is sometimes a record of failure. The actual classroom work in some normal schools is, outside of their training schools, but little better than that

of high schools or colleges. The teacher recites most of the time. Pupils are nagged and growled at in pretty much the same old way. In many classes pupils are passive recipients rather than active participants. The science and art of questioning is wholly disregarded. May not the high schools retort to our strictures that they are greatly handicapped by the poor instruction given by normal-school graduates in the elementary school? A further inquiry into the question: How may normal-school faculties improve the quality of their teaching? may properly supplement this report.

DISCUSSION

John H. Phillips, superintendent of schools, Birmingham, Ala.—The chief function of the high school in our educational system is to provide such facilities as shall enable the pupil to discover himself. When the pupil enters the high school, he is unknown to himself, his teachers, and his parents. His tastes and aptitudes, his purposes and aspirations are to be developed by the instruction and environment of the school. At what stage in the course a pupil is expected to determine his future work, or when the process of differentiation in the interest of those desiring normal-school training should begin, is not quite clear. In some of our smaller high schools, it may be seriously questioned whether there is not already more differentiation, resulting in diversity, than economy and efficiency will justify. What is chiefly needed in the teacher is a solid academic foundation for professional work, coupled with the power of translating thought into action.

The graduates of normal schools who become teachers in our elementary schools may be readily divided into two groups: First, those who have graduated from a good high school prior to their entrance upon a professional course in a normal school, and second, those who have received both their academic and professional training in the normal schools. It seems to me that a comparison of these two groups in practical school work may be helpful; it will enable us by observation and experiment to ascertain the results of high-school training when that training is controlled by the normal-school ideal, and to compare these results with those of the regular high-school course conducted without specific regard for the normal school. In such a comparison, however, we must not overlook the diversity of conditions in different sections of the country. There are normal schools that do not require for admission or graduation the equivalent of a standard high-school course, while there are others whose curricula place them upon the level of the college or university.

In the first place, we should compare the two groups as to breadth and accuracy of scholarship. The academic work of some of our normal schools is apt to be narrowed to the requirements of the state examination, and the demand for the immediately practical is apt to forestall the necessary breadth of scholarship. We still have too many normal schools of this class, where an attenuated professional structure is attempted upon an inadequate academic foundation. In the next place, it is pertinent to inquire which of these two groups, upon the whole, is found to be more flexible and adjustable to the varying conditions of the schoolroom. The former group has the advantage, in the majority of instances, of having passed thru the grades, and their ability to cope with questions of class management is apt to be superior. The so-called model school of the average normal school is an entirely different thing from an actual public school, and fails to provide the conditions necessary for the development of initiative and executive power, which will be required in the average rural or urban school.

The danger incurred by the special preparation for the normal school in the high school is twofold: it necessitates the selection of a vocation and consequent differentiation

in work at too early a stage, before the pupil has had adequate opportunity for self-discovery; it further tends to narrow the academic work of the pupil to those studies deemed of practical use in the vocation selected. These objections apply equally to special preparation for the law school, the medical school, or any other school requiring scholarship and culture as a basis for technical and professional training.

The work of the high school in its preparation of the pupil, whether for the normal school or for any other professional school, should unquestionably emphasize the topics outlined in the paper. In addition to these, our high schools, as well as our normal schools, should provide more specific ethical training than that now afforded. Perhaps the chief weakness in the average teacher is inability to utilize the lessons and incidents of the school for the purpose of ethical instruction, and for the development of sound morality in school and community life.

J. A. SHAWAN, superintendent of schools, Columbus, Ohio.—There are three elements of supreme importance in the qualifications of a good teacher: personality, scholarship, and capacity for growth. The normal school should take knowledge of the first and aim to develop the other two. It has been said here today that many a child decides to become a teacher while in the lowest grades because of the strong personality of the teacher and a desire to imitate her in life-work. No doubt this is true, and if that desire remains, it is proof that fair teaching has been done in the upper grades as well as in the lower ones. As young people are ready to choose their life-work, how important it is that a thoroly sympathetic and wise teacher act as a vocational adviser. This is the high-school teacher's opportunity. In the absence of personality and an indication of right ideals, industrious habits, and capacity for growth, no one should be advised to enter a normal school as a preparation for the teaching profession. The right spirit and a deep interest in the welfare of others is vital. To illustrate:

Some time ago I attended an entertainment given to parents by the pupils of a certain school. As a part of the program, a young lady, a member of the school, played a solo on the piano with rare skill and musical feeling. During the exercise two teachers of the school were engaged in conversation, much to the annoyance of those about them. Their excuse was that they could not understand the music and so were not interested. They failed to realize what should be the attitude of the true teacher: first, an appreciation of an ability on the part of one of the pupils of the school to do a piece of work which they could not do; and, second, really a spirit of prayer for the success of that work.

While signing the report of the committee and believing in its point as a whole, I wish to express my own preference for a full four years' course in Latin rather than a division of time between that and some other language. Say what you will, the classics give the most dependable foundation for culture and literary taste and enjoyment. Besides that, Latin affords a good training-ground for mental discipline. Such work cannot be well done without giving a splendid basis for sound scholarship, one of the very important elements of a strong teacher.

The normal school itself should mainly inspire. It should give a new vision as well as professional training. It should in no sense attempt to complete one's education, but should give a broader view and create an abiding appetite for more knowledge. Under such conditions, the capacity for growth should manifest itself. A student—a graduate, rather—who goes out believing that his education is complete is certainly a ripe scholar and ready to be plucked. There is little chance of further growth in such cases. If the normal school enlarges the vision of its students and inspires in them a love for study and investigation, it does well. Such a result is more to be desired than the self-complacency that often comes with the accumulation of knowledge merely.

HOMER H. SEERLEY, president of Iowa State Teachers College, Cedar Falls, Iowa.—If a special preparation were able to be assured for such high-school graduates as decided

to enter normal schools, their training to be efficient teachers could be accomplished in a shorter time.

This proposition has the hearty indorsement of all those who are students and teachers in normal schools. To them it looks not only desirable but essential. Perhaps a little investigation of what the transfer from high school to normal school must bring to the student is not a waste of the time of this Council.

One of the losses that most students are compelled to experience is due to the very unsatisfactory union that commonly exists between the Senior year of the high-school course and the Freshman year of the college course. Time is a large factor in making an education thoro and serviceable, but time spent in the struggle to make a successful connection between the secondary school and the higher schools is just so much time wasted. For some years there have been teachers' associations, made up of college and high-school representatives, which have held annual meetings endeavoring to bring about a more satisfactory relationship of these classes of schools for the benefit of high-school pupils who intend to become college students. Despite these efforts, this relationship still remains unsettled, being one of name rather than one of fact.

The high schools properly say that the preparation of pupils for college is not their sole function and that in addition they cannot be sure to satisfy the variable college demands even if they make fitting for college their sole function. Many colleges prove by their annual reports that their academies are the secondary schools from which the greater number of their satisfactory college Freshmen come. They assert that it is necessary for them to maintain these academies in order to prepare the larger number of those who take the full college course if their time is to be properly conserved.

Since this statement is no doubt true to a certain extent as regards general education, it would be doubly difficult for the high schools to comply with the limitations and the standards that normal schools might endeavor to establish as regards special education. As a matter of course, normal schools would be obliged to require extraordinary preparation in the scholarship of the elementary branches of the course of study, a degree of excellence and of thoroness in this respect that is not necessarily required by those who leave the high school for college or for vocational undertakings. The experience of the normal school in preparing its own lower-grade students for Freshman studies is therefore more satisfactory as a whole than is the plan of depending upon the high schools for such material. The students in the normal preparatory courses may be lacking in social culture and acquaintance with the world, but they are commonly more mature in age and more willing to conform to demands, they are more ambitious to attain accuracy and full mastery, and they are influenced more by the occupational spirit, than are the young students from the high schools who have been making school-going their occupation and have become inured to the tedium and the fatigue that continuous school work produces. Hence lack of responsiveness and resistance to demands is frequently a decided disappointment to the normal-school professors who deal with high-school graduates.

It therefore seems probable that this notion of a system of schools so organized as to lead the pupils from one grade to another by imperceptible stages from the kindergarten to the college is more theoretical than practical, as its very continuity wears out the persistence, dulls the interest, and eliminates the spirit of application and energy. The pupil can get too much of even a good thing, and the dissatisfaction that is constantly heard with the preparation and the efficiency of the Freshman is largely a consequence of his being overtrained and overtaught, overinstructed and oversupervised. He is lacking in spirit, he is deprived of his enthusiasm, he is depleted in his independence, and he is exhausted in his resources by the demands and the requirements of the system.

Now the normal school could demand the impossible of the high-school graduate. It could expect from him what he may never have had, enthusiasm; it can urge him to display what his training has eradicated, confidence in the wisdom of the professor; it can insist upon what his tastes reject, decided thoroness in everything; it can imply that

he is possessed of capabilities that were never developed, the power to study alone and reflect upon his information—the capabilities that only mature men can show. Hence normal schools find shortcomings everywhere; they are able to ascertain deficiencies in much that he does that they think he has had; they are amazed at his inability to do all the things that their own academic students can easily demonstrate.

It is enough to say that it is not so much a different teaching and training that is wanted in the high school as it is a different measurement of accomplishment and a different treatment and management upon the part of the normal-school professors. There is much room for readjustment, for review of principles, for reconsideration of things that are fundamental, for sympathy with incompleteness and imperfection, as all these conditions will be found in the average high-school graduate. In fact, the wonder is that, in the change of environment which comes from the new standpoint and from the modification of object and purpose, the high-school graduate succeeds as well as he does when undertaking the class work and the organized plans of the average normal school.

Then there is another supreme difficulty when viewed from a nation-wide standpoint. Normal schools cannot be standardized as educational institutions, because they are provincial and statutory in their status and in their scope of endeavor. There are at least four classes of state normal schools, when their courses and plans of training are investigated. This diversity of standard complicates the situation and prevents definite conclusions. From the Upper Mississippi Valley standpoint the preliminary report is quite generally approved. From other standpoints there will be much chance for difference of opinion.

J. Stanley Brown, principal of Township High School, Joliet, Ill.—It is my judgment that it is both unfair and unwise for either the normal school or the college to dictate to the high school what subjects shall appear in the course of study, what place they shall have in the course of study, or in what quantity they shall appear. I believe the high school ought to be as largely autonomous as the elementary school or as any other school, and that its supreme purpose ought to be, and in a large measure is, the interpretation of life in terms of the community's highest need. I do not believe that the higher institutions of learning are today in any considerable degree dictating either the course of study or the supply of the teachers to the high school. What is true in this respect today was not true ten years ago.

The growth of the modern high school, its place in the community, and its importance as an institution in itself have given it such a unique place in education that it ill becomes any other educational institution to interfere with it, to hedge it round-about, or to make inroads upon its especial field of activity. It is supported entirely by taxation; in many places by local taxation, and therefore the decision of the questions, "What shall it teach?" "How much shall it teach?" and, "To whom shall it be taught?" resides in the community whose institution it is, and not in any external organization that might wish to use it for some ambitious purpose.

I see no good reason why we should not have the same relation existing between the elementary school and the high school, the high school and any other institution doing work beyond it. It is by no means demonstrable that one subject will produce the same effect as another subject, or that one subject will produce the same effect when taught to two or more different students. It is therefore clear that while we may have academic notions supporting the view that English, mathematics, science, history, and foreign language constitute the best preparation for one looking forward to normal-school training, we have also large numbers of examples of teachers who are doing excellent work and are enthusiastic over that work, but have not followed this specific group of studies. For this reason we recur to our former statement that it is better that the elementary school work out its own problems in its own way, with no specific notion of fitting for high school, and that in like manner the high school should work out its own problems peculiar to the

community in which it happens to be situated and with no specific intention of fitting for an institution beyond the high school.

The function of any public high school is to interpret life in terms of the needs of the local community whose it is, by whom it came into being, and for whose supreme service it exists. It cannot, therefore, change its aim in order to satisfy the wishes of any other institution.

The normal school must not set itself up as the one institution to which the high school must bend its every energy in an effort to supply the kind and type of individual that the normal school thinks best for its own development.

It has been asserted that the high-school teacher lacks vital teaching power because of the desiccated atmosphere supplied willingly or unwillingly by the colleges or universities. That this is true in very rare cases, we must admit. That it is also true among normal-school teachers in larger numbers, we as willingly assert.

The conditions in a high school which make for vitalizing teaching are naturally better than they are in a normal school with a single purpose, because in the former institution there must always be a great effort to reach out into a dozen lines of possible activity rather than into a single line. Hence, the stimulation must come from a dozen different sources rather than from a single source.

It has been charged that the high school has a tendency to depreciate student activities not directly fitting for college. Our observation and experience is that a large measure of sympathetic encouragement is given to all kinds of legitimate student activities, including music organizations, athletic organizations, debating clubs, dramatic clubs, etc., and that such subjects as domestic science, commercial branches, manual training, arts and crafts, etc., are as carefully supervised as any other subjects in school, and that the high school is anxious to serve the community in whose behalf these newer courses have been established. It is not difficult to find high schools that are so closely related to the community that credit has been legitimately given in instrumental music work largely or entirely taken outside of school, and for certain other courses taken independently of the school itself. These courses, so taken, are checked up according to the school's unit of measurement and are credited toward graduation in the same way as any other subject.

In conclusion, let me say, the supreme purpose of the high school is to serve, not primarily the normal school or the college or the university or the professional school, but the community in which it is located and by whom it is supported, and therefore we think that it is the business of any other institution beyond the high school to accept the product of the high school recommended by the high school, and to treat that product in the same sympathetic way in which the high school treats the boys and girls coming to it from the schools below.

CHARLES S. CHAPIN, principal of State Normal School, Montclair, N.J.—I disagree with Dr. Felmley's report *in toto*. He has two main propositions, neither of which applies to normal-school conditions in the East.

1. He seems to me to disparage scholarship, or, at least, to draw too sharp a distinction between the scholar and the teacher. I do not share his sneer at college degrees, nor his strictures on high-school teachers and teaching, nor his implied contempt for college and university men. Of course, a scholar who cannot teach is as much out of place in a normal school or in any other school as a born teacher who has no background of advanced study. No such alternative need be considered. It is quite possible to secure Ph.D.'s who can teach, and, other things being equal, they should be preferred over men of too slender academic preparation. The standing reproach on normal schools has been and is the lack of scholarly attainments of the members of their faculties. For my part, I shall always demand a degree or the full equivalent, combined with proved teaching power, as a prerequisite to appointment on the faculty of the Montclair State Normal School. The conflict between scholarship and teaching ability is largely fictitious

and artificial, and it does not become us of the normal schools to allow this report to place us in a false position on so vital a matter as scholarship.

2. The committee's report calls for *special* high-school preparation for admission to the normal schools. One of the features of this special preparation is, if I heard the chairman correctly, the elimination of the present culture studies from the last two years of the high-school course, and the substitution of a review of the common-school subjects.

I dissent from this proposition even more emphatically than from the first.

This report discloses conditions with which we in New Jersey are not familiar. Dr. Felmley says that the great majority of his students come from small country high schools. Eighty per cent of our students come from city or good suburban high schools. Our courses are standardized by the State Board of Education. We need no such special course as this report calls for. Such a course will give our pupils poorer preparation than they are getting now. We don't want the Latin, literature, science, history, and the rest cut from the last two years of the high school in favor of arithmetic, United States history, and geography. I might make an exception in the matter of geography, if it were of the right sort, but Dr. Felmley's proposition would give us a distinctly narrower class of pupils than now.

A candidate for the normal school should bring to its doors at least the following minimum of preparation:

(1) The habit of speaking and writing good English.
(2) Some knowledge and appreciation of good literature.
(3) An elementary acquaintance with the history of England and modern history.
(4) The ability to read at least one foreign language.
(5) Such a knowledge of natural phenomena as may be gained from laboratory courses in two sciences.
(6) The ability to draw from the object.
(7) The ability to read music.
(8) A knowledge of the elements of plane geometry.

My point is that this schedule of subjects corresponds exactly to the general or English or scientific courses of our New Jersey high schools, and we are entirely satisfied when our candidates have completed such a general course satisfactorily. My chief criticism on some of our high schools is directed, not at the course of study, but at the apparently low standards of grading, promotion, and graduation. The only special feature I would ask in preparation is that the candidates for the normal school review the common-school branches in the last half of their Senior year in the high school. My position disposes of all the difficulties that seem to inhere in the postponement of one's intention to enter the normal school. The candidate prepared in our high schools, not *specially*, as this report suggests, but without reference to her destination in life, may enter our normal schools on opening day without examination. I am detailing the actual practice of admission to the New Jersey normal schools.

3. I dissent also from the idea expressed in the report, that the normal schools shall dictate the course of study in the high school. We of the normal schools are self-governing, taking our orders from no higher institution. It is not only just, but it is very good policy, to respect the autonomy of the high schools. I shall be entirely satisfied if they will teach well any of the courses they are now offering, and shall be glad to take any of their graduates thus prepared, provided they have the personality of the born teacher. If the high-school people will discourage the temperamentally unfit from coming to the normal school and will send only those who are likely to become good teachers, they may prepare them in any course of study that includes all or most of the subjects I have enumerated.

D. B. PARKINSON, president of Southern Illinois State Normal University, Carbondale, Ill.—1. Exhaustive report of committee of great value to the cause of education.

2. Of great value to the normal school. Enables us to see the place of the normal

school in the scheme of education. The normal schools are not rated as they deserve. As professional schools they deserve to be placed in the class of colleges, or by themselves, at least not with the secondary schools.

3. But a small percentage of high-school graduates enter college. A larger percentage would enter the normal if all the states were as liberal toward her graduates from the state normal schools as the state in which this meeting is held. When this is done there will be a larger attendance upon our normal schools from the high schools. And then the prospective teacher will appreciate a course in his high school that will at once articulate with his normal-school work.

4. I suggest a thoro review in the common branches in the last year of the high-school course which shall prepare them for the special methods in these branches.

5. I suggest further that the same plan would apply with equal force to the subjects of drawing, vocal music, and perhaps some other studies, depending more or less on local conditions and demands.

6. I do not suggest at this time what subjects now in the high-school course should be displaced by those mentioned. This would be a matter of detail and could easily be worked out after determining that something of this kind should be done.

7. I recommend further that the high school find some magic wand by which her products grow into a more rational and serious attitude of mind toward the higher ideals of life. While many are ambitious as to the possession of ideas, too many are indifferent as to the higher ideals. If this change of heart could be experienced before entering the normal school a large amount of energy exerted there could be diverted into a much more desirable channel.

HEALTH PROBLEMS IN EDUCATION

THOMAS D. WOOD, M.D., COLUMBIA UNIVERSITY, NEW YORK, N.Y.

The most important of all our national resources is the health of the people. The most valuable asset in this capital of national vitality is the health of the children.

Public education is the logical, the strategic, and the responsible agency of the nation, of each state and each community, for the conservation and enhancement of the health of the children.

To become an effective instrument for the protection and promotion of child health, it is essential not only that the school should be a sanitary and healthful place for children, but that various agencies in public education should be so organized that each pupil may be given the best possible opportunity to escape disease, and far more, to attain in each individual the reasonable best in growth; in development of biologic, intellectual, moral, social, and economic power.

What may the child be allowed to accept in exchange for any actual or vital part of his health? How shall public education account for its stewardship if thru ignorance, neglect, or unwisdom any child fails of any essential health value, directly or indirectly necessary to insure the future well-being which the school might have secured for the individual?

It cannot be taken for granted that school children are healthy. The majority of them are not so healthy as they should or may be.

There are in the schools of the United States today approximately

20,000,000 pupils. Careful study of statistics and estimation of all conditions lead to the following personal conclusions:

From (1½–2 per cent) 300,000–400,000 of these have organic heart disease.

Probably (5 per cent) 1,000,000 at least have now, or have had, tuberculous disease of the lungs.

About (5 per cent) 1,000,000 have spinal curvature, flat-foot, or some other moderate deformity serious enough to interfere to some degree with health.

Over (5 per cent) 1,000,000 have defective hearing.

About (25 per cent) 5,000,000 have defective vision.

About (25 per cent) 5,000,000 are suffering from malnutrition, in many cases due in part, at least, to one or more of the other defects enumerated.

Over (30 per cent) 6,000,000 have enlarged tonsils, adenoids, or enlarged cervical glands which need attention.

Over (50 per cent) 10,000,000 (in some schools as high as 98 per cent) have defective teeth which are potentially if not actually detrimental to health.

Several millions of the children possess each two or more of the handicapping defects.

About (75 per cent) 15,000,000 of the school children in this country need attention today for physical defects which are partially or completely remediable.

Pupils need, and are unconsciously calling for, adequate care. Parents are demanding with rapidly increasing conviction and emphasis the service which public education can alone or most advantageously give in relation to child health. Teachers are consciously inadequate to this task of health care but are awakening to their responsibility in relation to it.

Physicians are, as a rule, too much occupied with the study and treatment of disease; they have too little time for, and too little inclination toward, the field of preventive medicine; toward the field of child hygiene; toward the field where medicine and education, with a constructive program of educational hygiene, or better, hygienic education, may insure to the growing child the realization of the best of his heritage, the correction of all remediable weaknesses and defects, and the attainment of a quality and fullness of life which shall put the human being on a par with the choicest flowers and fruits, the best of the valuable creatures so carefully and skillfully cultivated by man.

For while the human creature has, in part, a different destiny from and higher capacities than those of other animals and all other living things, still many conditions of his life are precisely or closely like those of the lower and higher forms of animate beings. Yet the human plant, the human flower and fruit, receives less adequate care relatively of the fundamental, biological life and health conditions than any other life species of particular value to mankind.

Of the values and attainments dependent upon physical and health care, the human being realizes less relatively than any other organic species cultivated by man.

Quite apart from the benefits of eugenics, we have little idea as yet of the possibilities of humanity conditioned upon a rational, complete, and constructive hygiene.

If it were possible to estimate accurately the gain to the race and to the nation in one generation by practicable care of child health—in preventable mortality and morbidity, in escape from helplessness and hopelessness, in improvement of physical, intellectual, and moral worth; in economic and industrial efficiency; in social and civic power; in human satisfaction and happiness, our country would be startled by one of the most stupendous facts in human history, and energized into one of the most telling educational reforms that the world has ever seen. In fact, it seems altogether probable that we are today in the beginning of this constructive health epoch. The country is coming rapidly to recognition of the importance of this broader humanistic responsibility of education.

Spasmodic, nobly intentioned efforts are being made all over this country to improve foundations of education, to correct physical weakness of child life. We have a variety of laws in a number of states providing for elements of supervision and care of child health. Some of these laws are permissive. Some are mandatory. Some are largely aimed at the correction of disease and defects. One or two are wisely and progressively constructive in plan, providing for a care of child health and development which will, if realized, do much to make human education a genuinely successful process.

There are about one hundred cities in our country, having about one hundred types of organization for medical inspection and health care of school pupils. None of the city systems which has been described in print seems satisfactory as a model for the country to follow unless it is that type in the city which entertains this convention. At least, St. Louis presents a department admirably planned and balanced in many essential elements.

The Wiesbaden system of medical inspection in Germany stands out as a pioneer model, which perhaps is still unsurpassed in the admirable composition of elements and in the remarkable spirit which has made that city organization so worthily influential as an example in Germany as well as in other countries, including our own.

Noteworthy features in the Wiesbaden system are:

1. The means for securing the co-operation and sympathy of parents and teachers.
2. The completeness of the examination of each pupil.
3. The frequency and regularity of the examination, coming at vital stages of the child's school life.
4. The filing of the health report, a school record, used for reference in connection with the school work of the child.
5. The scientific and educational interest of the doctors which insures thoro examinations and wins co-operation of teacher and parent.
6. The popular nature of the movement as it has developed among the people and has not been imposed by a control government.
7. The movement is an integral part of the school system and is treated primarily as an educational problem.

Some of the practical direct and indirect results of the Wiesbaden system may be stated thus:

1. Children of subnormal type are profitably delayed in entering school.
2. Individual children are made happier and more efficient.
3. Teachers are relieved by special individual adjustment of the weaker children.

To the movement can be traced:

a) The forming of special classes for defectives requiring modified treatment.
b) Installation of school baths.
c) Providing free meals for school children.
d) Establishment of free clinics and dispensaries for treatment of child ailments.
e) Founding of outdoor schools for weaker children.

The system is defended on economic grounds as an effective means of preserving and improving social and national efficiency. The spirit in which the personal supervision of the child's health in school should be conducted is well expressed in the following statement, written in characterization of the Wiesbaden organization:

> The new education is indeed more personal but it is more reverent and gentle than the old. Rudeness will wreck all. The human body is not vile. It is the instrument of instruments. The first condition of success is not that the doctor has degrees, it is that he should not offend one of these little ones. The behavior of children—that is not a thing to judge in the first place. To judge is easy, it has been done for ages; to understand is the new task begun very late. Hasty judgment precludes the possibility of complete understanding. To classify according to health is comparatively easy, it may be done by the three-card system. To classify ability and weakness is not so easy. Each child presents his own problems.

We lack today clearly established principles and ideals relating to the health responsibility and health problems of education. We lack reasonable uniformity of standards with reference to scope of work to be done; with reference to relative importance of different aspects of the health field; with reference to division of practical service in the health field between teachers, principals, schools, nurses, school doctors, teachers of hygiene and physical education, and other special teachers and school officers. We lack desirable uniformity of standards regarding localization of responsibility and authority for health supervision of school children; of forms of co-operation of educational and health boards; of details of co-operation between school and social or philanthropic organizations. We lack clear definition and realization of possible co-operation between school and home affecting the health and general welfare of the child. This last is most important, inasmuch as this educational supervision of child health, if carried out as it may be without weakening or impoverishing the home in any way, promises to be, and in some actual practice proves to be, the most natural and effective introductory bond between home and school, providing a basis for vital elements of sympathetic co-operative effort, affecting as well the mental and moral well-being of the child. We lack in this country the inspiration and guidance of a national pronouncement on this subject which shall give assistance somewhat commensurate with certain very telling statements contained in the English Education Act, passed by Parliament in 1907. In this we find the following:

This new legislation aims . . . . at the physical improvement and, as a natural corollary, the mental and moral improvement of coming generations. It is founded on a recognition of the close connection which exists between the physical and mental conditions of the children and the whole process of education. It recognizes the importance of a satisfactory environment, physical and educational, and, by bringing into greater prominence the effect of environment upon the personality of the individual child, seeks to secure ultimately for every child, normal or defective, conditions of life compatible with that full and effective development of its organic functions, its special senses, and its mental powers which constitute a true education.

This memorandum also states that the work of medical inspection cannot be properly accomplished unless

t h e teacher, the school nurse (where such exists), and the parents or guardians of the child co-operate heartily with the school medical officer.

What may the National Education Association do thru the National Council of Education to further the interests of this health cause?

It seems desirable that after careful study of the field cogent recommendations should be formulated which may furnish definite guidance to states, cities, and rural districts concerning the best practical measures, methods, and forms of organization for accomplishment of work under all the varying conditions in the health field.

We need new types of educators, physicians, nurses, and parents with more comprehensive and thoro training to provide the requisite care and supervision of childhood with full regard to the preservation and enhancement of health in relation to the even more important faculties and values to be developed in the lives of the young.

Fathers and mothers need to become wise in knowledge of child nature and more skilled in the art of parentcraft which may help the child to realize the best of his possibilities on a sound and cultivated biologic basis.

Superintendents and principals of schools must see clearly thru and around this health field if they are to have true estimation of relative values and are able to meet their varied obligations in relation to parents, teachers, pupils, as well as to boards of education, and other official bodies who determine the sanction and financial support which are necessary for the practical conduct of the work.

Physicians require for this field of educational hygiene, not only medical training and skill, but understanding of educational principles and methods, with keen insight and sound judgment which will enable the school doctor to acquire thoro understanding of the child and to help make the school a healthful place for the pupil, and at the same time to help adjust the individual most successfully to the educational process.

We need more convincing demonstration of the value of various measures and methods employed for the promotion of child health, so that sufficient money may be appropriated for school hygiene by those who control the public funds.

Educational hygiene includes much more than health examinations for contagious disease and chronic physical defects, altho such examinations make the basis for all effective care and adjustment.

Other factors of essential importance in the health field are the following:

a) Maintenance of sanitary, healthful school environment with clean schoolhouses; abundant light, good air, etc.

b) Hygienic instruction and school management, with particular attention to influence of teacher upon nervous health of pupils.

c) Effective teaching of health and hygiene to all pupils in the schools.

d) Rational supervision and direction of play, games, athletics, and all healthful and satisfying forms of physical education.

Special features in the schools, or closely related to the schools, which have direct bearing on health include the following:

a) Homes of the pupils.

b) Playgrounds and gymnasiums.

c) Dental clinics and other medical clinics for children.

d) Classes for defectives and cripples.

e) Open-air schools.

Improvement in school hygiene involves prominently these factors:

1. Recognition of extraordinary value of work of school nurses, and employment of nurses in the schools.

2. More comprehensive and thoro training in school hygiene in all normal schools and other institutions for professional education of teachers.

3. Better technical training for school physicians, school nurses, teachers of hygiene and physical education, and other special officers in this field.

4. Requirements of tests of knowledge and skill in various phases of school hygiene for teachers in general, and certification of health specialists of different types.

THE SCHOOL'S RESPONSIBILITY FOR PROVIDING HEALTHFUL ENVIRONMENT AND PROGRAM

R. W. CORWIN, M.D., CHAIRMAN OF COMMITTEE OF AMERICAN MEDICAL ASSOCIATION ON HEALTH AND PUBLIC INSTRUCTION, PUEBLO, COLO.

I have nearly worn out a copy of Dr. Wood's Ninth Yearbook, in preparing this talk, yet I shall not hold him responsible for what I say. You have all read this book. He has told my story, and better than it is possible for me to do. In fact there is no reason to call your attention to these matters. But some of your teachers are not so fortunate as yourselves, they have not had time or opportunity to investigate or to give health sciences much thought. For this reason we ask permission to offer our assistance. The responsibility of the school falls not alone upon the superintendent, but as well upon all the teachers, the school board, and the laity. Without taking further time to explain why I am here, I beg to say: The object of the public school is to improve the human race physically, develop it

mentally, and strengthen it socially and morally. The public school fails in proportion to its inability to meet these obligations. Health occupies the first attention of the school's responsibility. Killing education is waste of time, money, and human tissue. Healthful environment is the foundation of education, and program the superstructure.

The school's responsibility for providing for the health of the school-young is of paramount importance, both to the child and to the public. Let us review some of the more important features:

There is the responsibility of selecting the site for a building in a large city, where the ground is expensive, where there is smoke, dirt, noise, little sunlight and pure air; limited playground; no trees, flowers, or grass; where the building must be of many rooms and floors, and where a large number of children congregate in a small area; or in the country, where swamp and malaria, wind, cold, snow, rain, dust, hot sun, and bad roads demand attention.

There is also the responsibility of selecting teachers; of the health of children from five to twenty years of age; of detecting and correcting mental and physical defects; of overcoming bad heredity, and evil home and social environment; of providing for the underfed and poorly clad, and suggesting to the overfed and richly clothed; of physical examination and physical training; of school nursing and quarantining; of sanitation in the building and about the grounds; of educating the young in health sciences; of—and not least—educating the parents and friends, overcoming prejudices, and obtaining their co-operation.

To review just a little more in detail:

The principles of ventilation, heating, lighting, and plumbing are too well understood to need reviewing, but there are many minor points of importance that are often overlooked and may not be out of place to mention at this time. For instance: the height of rooms—too great to be well or easily ventilated, heated, or lighted, to say nothing of increased cost of construction; dust-catching projections above doors, windows, blackboards, wainscoting, and picture molding—all unsanitary, and difficult and expensive to clean; square corners hard to clean; wainscoting and floor cracks impossible to clean; ornate capitals never cleaned; balustrades with all sorts of ridiculous projections that hold dust and germs; curtains and window-shades always dusty and dirty; doors that slam and annoy; wall colorings that psychologically irritate; halls that reverberate sounds, and disturb; machinery that is noisy; domestic science departments which emit offensive odors; and chemical laboratories, dangerous on account of fire, which generate disagreeable gases. These three departments should not be in the building with the rest of the school.

May I take the liberty of here presenting a plan of school buildings, tried and found worthy? [Here was introduced plan of model schoolhouse and incline.]

While the exterior of the building should be architecturally attractive, and educational, it is the interior that should be given the deepest study. Too many think much of the looks and not enough of the use of the school building. The superintendent is not to be criticized, but the school board, real estate men, and patrons, full of civic pride. My attention was called to a massive stone building in a hot climate. The person said, "All you need here is a floor and a roof." It is the size of the pile of brick and stone that too often is given first attention.

I know how you gentlemen have to fight us members of the board and thoughtless outsiders. I am sure if you could have your way, many would have every girl and boy study out of doors and use the schoolhouse only when it rains. The laity forgets the lesson of the Black Hole of Calcutta; they do not stop to think why sleeping out of doors is being so universally advocated; they have not learned that it is not only the presence of CO_2 and the absence of oxygen that poisons, but as well organic matter brought into the room by forty to fifty pupils. They have no idea that one catches cold in a badly ventilated, dry, and close room more easily than in a cold room, or out of doors; they have never heard the statement that somebody has made, "that a person may go three weeks without food, three days without water, but only three minutes without air"; that bad air kills 40 per cent of the people, and perhaps is largely responsible for the illness of the other 60 per cent; that 20 per cent more teachers die of tuberculosis than workers in other occupations. They have not studied the lessons given us by the Japanese and Panama sanitarians. We shut out the cheapest thing on earth—fresh air—and what little we permit to enter our rooms we cook to death, if possible.

Just a word about the drinking-cup which has gone, we hope, forever. A saturated solution of boric acid with $\frac{1}{2}$ to 1 per cent formalin was placed in a jar; a glass with *Staphylococcus albus* upon it, immersed in the solution eighteen minutes; the viability of the germs was then tested—they grew and thrived. The drinking-cup may be used by the teacher for illustration.

Hygiene of instruction or program covers a broad field. It deals with knowledge and care of the pupils at all ages and under all conditions; how to instruct and what instructions should be given that pupils may know how to protect themselves and care for others. But first the teacher must be considered as to health, preparation, and duties. No sick or half-sick teacher can do good work. Every teacher should have a pretty thoro course in all the principal branches of health sciences. No teacher in any department should be employed who has not had a course in health sciences. Every teachers' school should give a course in health sciences. The duties of a teacher extend outside of the school; to the parents it pays to devote this time.

New discoveries are being made every day. To keep up, teachers must study all the time. There are four ways in which one may keep up in this work:

1. Postgraduate work, which many teachers take at a sacrifice of time, money, and vacation.
2. To take bulletins prepared by specialists. This is feasible.
3. By attending lectures of specialists sent out from a central bureau.
4. By lantern slides and moving pictures prepared by a central bureau.

In every school there should be someone prepared to teach health sciences. The object of the school is to teach. The most important thing to teach is the principles of health, or a course in health sciences. The health of the pupil must always be considered and protected. Today it is very fashionable, and justly so, to criticize child labor. How often do we see children who enter school in the fall with rosy cheeks and full of energy depart in the spring pale and languid. What is the matter? Something is wrong. Is it poor ventilation? Is it too much work? Too long hours? (The faithful student works from ten to twelve hours a day—more than is demanded of a laborer.) Is thinking too hard work? (A servant girl said she wanted $15 per month if she did not have to think, but $25 if she had to think.) Is our method of teaching wrong?

In teaching health sciences, the following are of vital importance to consider:

1. Prophylaxis or prevention.
2. Resistance—the strength of the individual—his ability to throw off disease.
3. That ignorance is the most common cause of disease.
4. That someone is to blame for ill-health.
5. That "1,600 people die in the United States every day who should live."

That "1,000,000 people in the United States are sick every day who should be well."

That "sickness costs the United States annually one and a half million dollars."

That "within the next year, 600,000 people in the United States will die, all of which deaths might be prevented," and which is not the case in other countries where better sanitation is observed.

Then, is not the duty of the school evident? Is it not our duty to teach students how they may protect themselves against disease?

To learn how to protect ourselves against disease is more important than many things that are learned in school. There is much that the student learns which he soon forgets, but he cannot forget health, which is with him all the time, especially if it be bad health. Are we not our brother's keeper? That question was answered centuries ago. The question is the same today and we know the answer. Is not the responsibility of the school plain?

DISCUSSION

Albert E. Winship, editor *New England Journal of Education*, Boston, Mass.—One state department in California sent to the Imperial Valley at one time 30,000,000 ladybugs to deal with the pest scale that is attacking the apricot trees. This was only one installment for one pest, for one variety of trees in one section of one state.

The cry for help comes from every nook and corner of the land for state governments, state agricultural colleges, state universities, and the United States Department of Agri-

culture to find relief from the pests and diseases affecting plants and animals of various kinds. The appeal seems universal, but the minute that the remedy affects any person or any community adversely commercially, even transiently, the opposition is much more noisy than the friends. This has been specially noticeable in the case of milk legislation and inspection.

The health of children is the last to receive attention. We now know how to save the lives of half the infants who would otherwise die in the first year, how to eliminate much of the absence from school caused by illness, how to prevent much of the retardation in school, and how to increase greatly the efficiency of many pupils in school.

Few things in all modern life have equaled the benefit to humanity of public attention to the health of children until after the time of epidemic children's diseases is largely passed. It would seem as tho at this men and angels would rejoice.

Contrariwise all this seems simply to have stirred up the depths of the wrong class of men and the anti-angelic host.

Tuberculous cattle seem to have more ardent friends than children, and even the old-fashioned, vile milk-can dishwater has more vociferous champions than sweet babyhood. It sometimes seems as tho coffin-makers, funeral undertakers, and makers of funeral wreaths were liable to join the crusade against the self-sacrificing and devoted laborers for the health and life of children.

It is sufficiently difficult to combat the ravages of disease and the ignorance that breeds and spreads and promotes disease, but when one has to struggle also against commercial interests that thrive on disease-producing conditions it makes the problems infinitely more difficult of solution.

Wherever there is to be found a man or woman who really loves children more than any of the many commercial interests involved, we should endeavor to inspire the patriotism that leads to heroic crusading for the further solution of health problems.

J. F. Keating, superintendent of schools, Pueblo, Colo.—You seem to be skeptical as to the practicability of the cottage plan for grade schools just presented by Dr. Corwin. Let me say to you this is no mere theory, for the plan is in practical operation in Colorado and were there time I should like to discuss the plan at greater length. Come to Pueblo and we'll show you.

Just a word in regard to this whole health program. No other question before this educational meeting is of such vital importance as is this matter of the health of the school children and of the sanitary conditions of both home and school. We seem fully appreciative of this fact here tonight but this will avail little unless the agitation be kept up. To this end I suggest that either this committee be continued or another permanent committee be appointed to urge in season and out of season the necessity of caring for the health of the school children of the nation.

PRELIMINARY REPORT OF COMMITTEE ON RURAL-SCHOOL EDUCATION

E. T. FAIRCHILD, STATE SUPERINTENDENT OF PUBLIC INSTITUTIONS, TOPEKA, KANS.

The rural school is the one laggard in the educational procession. Not only has it failed to keep step in the march of educational progress, but there are those who declare that, taken as a whole, it is less efficient than it was twenty-five years ago. Many reasons may be advanced for this lack of development. However, no study of the situation will be complete that

does not recognize as a definite factor the great change that has taken place in community and social conditions. The ever-increasing trend of rural population toward the cities, and the growing percentage of tenant farmers have had a distinct and deterrent effect upon our country schools.

The educational thought of our age has been directed toward the improvement of the city-school system, the high school, the efficiency of college, normal school, and university. The best efforts of many of the wisest and most influential people of our country have constantly been devoted to the betterment of these means of higher education. And the emphasis of our thought has been placed long and devotedly on these educational agencies at the expense of our rural schools. Not only has the educational press rendered notable assistance, but the general press has contributed much to the public understanding and appreciation of educational activities as they relate to city systems and to higher education in general. The people as a whole have a very fair grasp of the importance, value, and character of the work done in this type of schools, and demonstrate their appreciation and approval by making most liberal appropriations and levies for their support.

We rejoice in the great things that have been done for higher education, but submit that the time has now come when the same generous support and the same ardent labor should be devoted to the improvement of the rural schools. Altho they serve directly the interests of the greatest percentage of our population, and tho they are admittedly the most inefficient part of our educational system, yet they are utterly lacking in that generous and unselfish support so freely given for the advancement of the high school and college.

THE RURAL SCHOOL OF TODAY

The following is a true tho not full indictment. Of the 12,000,000 rural-school children, constituting a clear majority of the whole number of the youth of school age, less than 25 per cent is completing the work of the grades. The teaching body is immature and lacks proper training. Terms are too short. School buildings are poor, unsanitary, and ill-equipped. The school enrollment is constantly decreasing. The supervision is wholly inadequate. Cost of instruction is higher than in the grades. High-school privileges are denied to the great majority of these boys and girls. The strong, virile rural school of a generation ago has gone and in its place is a primary school weak in numbers and lacking in efficiency. The country boy and girl of this strenuous and complex twentieth century are not afforded equal educational opportunities.

With this known body of fact the Committee on Rural Schools has not thought it necessary or desirable to employ its energies in seeking further details as to the weakness and insufficiency of the rural schools of today. On the contrary, it has decided wisely, it is hoped, to address itself to a study of how best to promote and to strengthen the rural-school system, and will

attempt to propose such remedial plans and legislation as will make for the most effective and the most immediate betterment of these schools. With this in view it has not undertaken to idealize, or to discuss measures that, however desirable, are not in the nature of things capable of somewhat early realization. At the first meeting of the committee held in November last in Chicago, the following list of subjects was chosen for consideration:

ORGANIZATION:

1. The Unit of School Organization.
2. Consolidation.
3. Classification (Standardization).
4. Minimum Term.

ADMINISTRATION, AS TO:

5. Funds—Their Sources and Distribution.
6. Compulsory Attendance.
7. The School Plant.
8. Libraries.
9. Supervision.
10. Records and Statistics.

INSTRUCTION:

11. Uniform Courses of Study, including gradation and a minimum number of classes.
12. Textbooks.
13. (*a*) Preliminary Preparation of Teachers.
    (*b*) Teacher-training Courses in High Schools.
14. Appointment and Tenure of Teachers.

SOCIAL ELEMENTS:

15. (*a*) Co-operation.
    (*b*) The School as a Social Center.
16. The Home and the School.
17. Organized Games and Plays.

RURAL SECONDARY EDUCATION:

18. (*a*) Free Tuition.
    (*b*) Consolidated, Township, and County High Schools.

A more detailed statement of subjects chosen for investigation and recommendation by the Committee on Rural Schools is given below:

ORGANIZATION:

1. The Unit of School Organization.—A consideration of the several units, district, township, and county, with a view to urging the general adoption of that one which affords the best results.
2. Consolidation.—A presentation of the advantages and of the imperative need of consolidation or centralization of schools from considerations of economy and efficiency.
3. Classification.—The adoption of a plan of systematic classification, or standardization, of rural schools with official recognition by the state of those schools which fulfill prescribed conditions, in the form of a moderate amount of state aid.
4. Minimum Term.—The enactment in every state of a law fixing the minimum length of the school year, with provision for state aid to those districts which without such aid would not be able to maintain school for the prescribed period.

ADMINISTRATION, AS TO:

5. Funds—Their Sources and Distribution.—A study of means of increasing school revenues, and a rational basis for the distribution of state and county school funds.

6. Compulsory Attendance.—A thoro study of the compulsory school laws of the several states, and a general investigation of means of increasing the attendance in rural schools.

7. The School Plant.—Model school grounds and buildings, and a standard equipment for rural schools.

8. Libraries.—The providing of a minimum number of suitable general and reference books in the form of permanent or traveling libraries.

9. Supervision.—

a) Closer Supervision.—The development of a plan for closer and more effective supervision, e.g., the Oregon plan, which provides for every twenty schools a supervisor under the direction of the county superintendent.

b) County Superintendents.—The system of county supervision including the qualifications, manner of selection, duties, tenure of office, and compensation of county superintendents.

c) State Rural-School Supervisors.—The need in each state of one or more rural-school supervisors, or visitors, under the direction of the state department of education.

10. Records and Statistics.—Systematic records that shall reveal real facts as to: (*a*) rural-school population; (*b*) enrollment; (*c*) average attendance; (*d*) length of term; (*e*) number of rural-school pupils completing the work of the grades; (*f*) comparative per capita cost of town and country system; (*g*) comparison per pupil of valuation of taxable property, town and country; (*h*) comparison of average mill levy in town and country; (*i*) comparison of value of school property buildings, etc., per pupil, town and country; (*j*) comparison of enrollment per teacher, town and country; (*k*) comparison of average number of school days attended in town and in country.

INSTRUCTION:

11. Uniform Courses of Study.—A provision in the several states for the preparation and compulsory use of a course of study for rural schools and suggestions as to gradation and a minimum number of classes; and in view of the general recognition of the need of a reorganization and redirection of the work of these schools, the feasibility of introducing additional vocational work, particularly in agriculture, and of providing at state or county expense special instructors therein.

12. Textbooks.—The adoption of textbooks that recognize more intimately country life and country environment.

13. (*a*) Preliminary Preparation of Teachers.—The enactment of laws providing for a more adequate preliminary training on the part of applicants for teacher's certificates.

(*b*) Teacher-training Courses in High Schools.—A system of teacher-training courses in high schools for the purpose of securing a better trained class of teachers in the rural schools.

14. Appointment and Tenure of Teachers.—The appointment, or nomination, of teachers by an educational expert, as the county superintendent, with greater permanence of tenure.

SOCIAL ELEMENTS:

15. (*a*) Co-operation.—Co-operation of social forces—the home, church, grange, farmers' institutes, extension work of colleges, papers, and magazines.
(*b*) The School as a Social Center.—The use of school buildings as centers for the various social activities of the community.

16. The Home and the School.—A close inquiry based upon the theory that the progress, discipline, qualifications, and development of the youth depend more largely upon the right kind of parental influence than upon all others combined. This may well include the question, To what extent approximately does the influence of incompetent parental supervision affect the capabilities, adaptation, discipline, and efficiency of the average pupils in our public schools? The state may provide for its boys and girls great opportunities, the acceptance of which the parent may easily prevent.

17. Organized Games and Plays.—The appropriation of play as an educational agency and the utilization of the child's instinctive interests as a means of promoting his intellectual and moral growth.

RURAL SECONDARY EDUCATION:

18. (*a*) Free Tuition.—The value of high-school training for country youth and the necessity and means of providing free high-school privileges for every eligible boy and girl.
(*b*) Consolidated, Township, and County High Schools.—The plan of instituting and maintaining consolidated, township, and county high schools; and the introduction of vocational training for preparation for country life and pursuits.

A careful study of the subjects above listed seems to justify the conclusion that we have here not only a series of vital and essential elements in the problem before us, but also a group of factors that are both practical and practicable. The various topics have been assigned to subcommittees for investigation, elaboration, and recommendation.

The subjects assigned to myself are: "Preliminary Preparation of Teachers" and "Teacher-training Courses in High Schools."

A vital weakness in our rural-school system is the lack of a genuine demand for properly trained teachers. I have knowledge of one state that bears an excellent reputation educationally where out of 8,000 rural-school teachers in 1910, 4,400 were found to have had no training beyond the eighth grade. The most constant and most imperative requisite of any plan of school instruction is an adequate supply of competent teachers. No other provisions, however ample, can be substituted successfully for capacity in this respect, nor compensate for the want of it. Not liberal appropriations, nor costly buildings, nor well-framed theories, but instruction that executes the purpose of all these, touches the mind of the scholar, and imprints thereon its own character and qualities, is the demand that must be met; and yet it is just at this point that our common schools, particularly our country schools, exhibit their greatest weakness.

First of all, then, is the need of legislation in every state providing that no one may apply for a certificate to teach in any public school who is not at least a graduate of a four-year accredited high school or its equivalent. It is a pleasure to know that this requirement obtains in several states of the Union today.

As to a teacher-training course in high schools, it is a well-known fact that a large majority of the rural teachers go into the work with little or no special preparation. Notwithstanding the multiplication of normal schools, it is rarely that a graduate of these institutions is to be found engaged in teaching in the country. It is a striking anomaly that the lawyer who looks after our material interests, or the physician who cares for our bodily health, even the veterinary who doctors our horses and dogs, the carpenter who builds our houses, or the machinist who repairs our automobiles, must go thru a long professional training or practical apprenticeship before he is regarded as fit to ply his trade. Yet every year thousands of inexperienced and untrained boys and girls are allowed—

even encouraged—to step out of the ranks of the common schools and to take their places as the counsellors and guides of the plastic minds and immortal souls of our dearest possession—our children. And this condition falls with greatest severity upon our rural population, for the school boards in all our cities and in most of our smaller towns have firmly established the rule not to employ a teacher who has not had practical teaching experience or special professional training. So the only place where the untrained tyro, with no education beyond that furnished by the eighth grade, may begin is in some country school. But the beginners must teach and the school must have teachers. As a consequence our rural schools become the only training school that the vast body of our teachers ever know; and here these teachers learn—by experience and experiment, by practicing upon the tender intellects of the most hopeful and virile youth of the land—those pedagogical principles and educational truths which they should have learned as a part of their preliminary professional training before ever entering the schoolroom "as one having authority." And even this does not tell the whole story. No sooner has one of these journeymen, or rather journeywomen, teachers by virtue of quick insight and ready acquisition—by reason of the born teacher's birthright—grasped the fundamentals of her great problem and proved herself capable in the application of them, than the superior inducements of the graded school and the ever-alert city school board allure her from the country to the town. And the rural school must begin over again the training of another teacher to go the same way; or, it may be, this time to experiment with one who was intended to have been a hewer of wood and a drawer of water instead of a teacher of men.

The only relief lies in requiring better preparation and some professional training for all our teachers. It seems clear that it will be many years before the normal schools, if ever, will address themselves to the problem of preparing teachers for the rural schools. The plan, therefore, of devoting the last year of a high-school course to special professional preparation for the work of teaching seems to be most desirable. In the states in which this system is in operation excellent results have followed.

But however well this committee may perform the important duties assigned to it, however wisely it may recommend, much more must be done. The country school needs assistance, it needs the help of the philanthropist and the business man, it needs the assistance of all institutions of higher learning, and the union of all social forces for its betterment.

Authority and money must be given the National Bureau of Education that it may undertake a campaign for the reorganization of the rural school.

Other agencies now devoting time and money to social uplift should be invited and urged to join in an effort to investigate thoroly rural-school conditions, to propose remedies, to direct public attention, to suggest remedial legislation.

And in addition to all this it greatly needs every possible help and assistance that can be given it by the Council of Education of the National Education Association. In short, it needs organized help if these schools are to perform their proper function.

Withal, there must be a nation-wide campaign of publicity. Public attention must be challenged and the rural communities must be aroused to the necessity of better school privileges for the children. A great trouble is the low state of public opinion, and a lack of knowledge as to actual conditions. Our efforts will be futile until we contrive ways and means to awaken the people to the magnitude and importance of this question. Of the importance, the necessity of publicity we find examples on every hand. No great enterprise is undertaken today, nor is success anticipated except thru the assistance of the press. Just as other great reforms of a social, political, or religious nature are brought about thru the widest possible discussion, so only can this great problem of assisting that vast army of country boys and girls be solved. The story is replete with human interest and involves the whole social fabric of our country's future. It is one that may well engage the earnest attention and the enthusiastic support of our best writers and speakers. What an opportunity is here offered our great magazines to champion a cause of such national and vital import! A series of articles prepared by those who write commandingly and interestingly, and printed in those publications whose readers are numbered by millions, would accomplish more in a campaign of one year than could be brought about thru ordinary means in ten years. And this alliance of the great papers and magazines can be secured thru the influence of this Council. The editors and owners are eager to undertake such a mission. Shall we not help them to find the facts and, if necessary, the writer?

Again, these schools need organized help. Recently a so-called commission of higher education met in the office of the governor of a great state to discuss ways and means by which its three state educational institutions might be rendered still more efficient. This commission was composed of the most representative men of that commonwealth. Among them were men skilled in letters, men who are experts in education, and business men who had made a brilliant success in the commercial world. Here were men, thirty in number, who for months had been devoting their energies and contributing the fruit of their experience to a consideration of means whereby these great schools might become yet more effective. The state superintendent of public instruction sat there, the only one present charged with the responsibility of daily considering the needs of that great majority of the youth who are never to have the advantage of college or university training. Is this not the situation everywhere? Where in all this broad land is there an organized body of men of the type above described devoting themselves to the task of improving the rural school? If such commissions could be formed in every state how swift, how certain

would improvement follow! The committee understands and appreciates the great progress that has been made in certain states in bettering rural-school conditions. It is aware that important surveys are being made and it rejoices. But the fact remains that there is no nation-wide movement in behalf of the country school.

Under the wise and capable administration of Commissioner Claxton the rural schools are to be helped as never before. We are earnestly hoping that some of the great foundations will add to their other activities the promotion of education in rural schools. These boards with their corps of skilled workers and their great financial resources could accomplish more than any other agency.

The problem before us is perhaps the greatest in America today. Certainly it is the greatest educational problem. It is nothing short of attempting to secure to 12,000,000 children their natural birthright—equal educational opportunity.

If we want to get more out of the rural schools we must put more into them. We can never have the best rural schools until we have aroused public interest in them. The national life and character of tomorrow is being set and directed by the schools of today. The country is the nation's great recruiting-ground. To it the city has always looked for its supply of men who do the great things: command armies, build industries, take the initiative. It is true that the cities are the centers of organization, but they are not self-sustaining. The rural population must always be the bone and sinew of any country. More than one-half of our school population is trained in the rural schools. These schools are inadequate. From every consideration, both economic and social, more careful attention should be given to our rural schools.

DISCUSSION

Adelaide Steele Baylor, State Department of Education, Indianapolis, Ind.—Altho the matter of consolidating rural schools in the United States has been under consideration since 1869, yet rapid strides have been made only in recent years. Today almost every state has taken some steps toward consolidation, and in many states the one-room district school will soon be a thing of the past.

Up to September 1, 1907, in the entire state of Indiana only 1,261 schools had been abandoned, while between September 1, 1907, and September 1, 1908, 350 schools were abandoned, a number equal to more than 25 per cent of all abandoned in the state before that time. Prior to September, 1909, out of 1,017 townships, consolidation had been attempted in less than half, while complete consolidation now prevails in a large number. A little over three years ago, in the state of Washington no effort had been made to push consolidation, and now there are 120 consolidated districts scattered thru 31 counties, and over 20,000 children attended school in consolidated districts last year. A very complete and most excellent report on consolidation, prepared by the supervisor of rural schools in North Carolina, has just been issued from the Department of Public Instruction in that state.

The advantages promised by consolidation are numerous and where the transition has been carefully made they are all in evidence. They include larger school plants;

sanitary buildings with modern conveniences; laboratory facilities; industrial education, including practical agriculture by means of farms in connection with the centralized plant; closer supervision; a new community spirit aroused by the new conditions, and the utilization of the plant as a social center where parents and teachers come together to discuss matters of common interest. Thru consolidation the high school is brought to the rural community with the same completeness that characterizes it in the city. The country boy and girl are not compelled to adapt themselves—many, many times to their detriment—to the city life, in order to obtain a secondary education.

The peaceful establishment and progress of the consolidated school have been aided greatly by railroads, both steam and electric, motor cars, and other improved methods of transportation.

No step in education has been more vital than this of consolidating schools, since it must mean, in a short time, the entire abolition of what has been and still is the idol of many hearts—the little red schoolhouse. It is a serious matter to displace a time-honored institution and its successor must look well to satisfy the causes for its existence, if it would continue. From the one-room building have stepped forth the founders and preservers of our nation. These men have pointed with pride to the rude one-room school in which they received their early education. They have dwelt upon the hardships of that early life and the lack of all such conveniences and facilities as we claim are necessary for a complete modern school. The consolidated schools must produce men of as staunch principles, as powerful intellects, as patriotic purposes, as did the schools they have supplanted. They must produce men and women who will point with the same pride to the consolidated school and recall their obligation to that institution for their education.

Our thoughts and energies must center, not upon the annihilation of the old, but upon the building of the new. The consolidated school is not an experiment, but a necessary step in the evolution of school machinery, and that it may fulfill its purpose in the social scheme, it must be established with care and consideration.

I do not take it that the work of this committee will be so much that of attempting to prove by statistical matter or otherwise that consolidation is necessary as to ascertain why it has not always been a pronounced success, what conditions have led to its ever being contrasted unfavorably with the little one-room school, and how these objections have been overcome.

It will be the business of the committee to investigate the classes of consolidated schools and attempt to determine the best type and the best method for securing this type. It will need to discover whether the typical consolidated school has been most satisfactorily organized by a gradual evolution from the one-room school thru the union school, the consolidated rural school, and other intermediate types, or by a more direct plan of passing from the one-room school to the complete consolidated school.

In this work of consolidation we are taking a step forward that will never be retraced, and the question for this committee to emphasize is how we shall create and perfect these consolidated schools that we may build surely for the future.

David Snedden, commissioner of education for Massachusetts, Boston, Mass.—It seems to me that the problem of rural education has been greatly complicated by certain traditional forms of organization which are peculiar to America. The elementary school was evolved before the high school and, as a consequence, the former is now customarily organized on the basis of eight or nine grades, the high school or secondary school beginning on the top of this. Many of the problems of the rural school would be simplified if the rural-school teacher had to deal only with children twelve years of age or under, older children being transported to centers for the purpose of receiving more advanced education. I believe it is easy to train a young woman to be a successful teacher of children for the first six grades, whereas I believe it to be exceedingly difficult to give a satisfactory education in the normal school for a person who must also teach grades seven and eight.

The weakest part of our American education is that which concerns young people over the age of twelve and under the age of sixteen.

If conditions remain as they are at present, it will be a long time before we shall have teachers who are qualified to handle in rural schools the upper-grade work. It is probable, indeed, that successful upper-grade teaching can be carried on only by means of departmental teaching.

Ernest E. Balcomb, Department of Agricultural Education, State Normal and Industrial College, Greensboro, N.C.—The greatest need of the rural schools is teachers who are properly trained, who have the ability to become leaders in rural communities, who at the same time have such a love for this work that they are willing to devote themselves to it in preference to positions in the city schools.

One of the chief reasons why we do not have more teachers who are adapted to this work and willing to follow it is that our normal schools take the young teachers who come to them from the rural districts where they are in touch with rural affairs and full of enthusiasm and desire to do something worth while for these communities, and make them into better prepared teachers from a scholastic point of view, but also give them a desire for work in the city schools. They give them such a point of view that they look with ill-concealed contempt upon work in a rural community.

I do not mean to say that the normal schools are entirely to blame in this matter, but I do mean to say that much of the training which normal schools insist on, such as Latin and the higher mathematics, not only does not help the rural-school teacher, but actually puts her in touch with a civilization which takes her interest away from that of the rural schools.

There is also much to be said of the duty of the patrons of the rural community schools. They must learn to appreciate the work of the teacher who is actually in sympathy with their mode of life, and they must be willing to compensate the teacher accordingly. They should be willing to say to any teacher who has the right interest at heart, "If you will go and get better preparation, we will give you additional compensation." They should be willing to see to it that the teacher has a comfortable and pleasant place to board. This must be either in reasonable distance of the schoolhouse, or there must be means provided for transporting the teacher.

When these conditions are fulfilled, and the normal schools make a practice of searching out teachers who have this natural talent and training them especially for the rural schools, some of the problems of the rural school will be solved.

I most fully indorse all that my predecessor, Commissioner Snedden, has said. It is generally a question of the teacher.

Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.—

[*Abstract*]

I. *The major issue.*—The general inefficacy of the American rural school has been, as we well know, widely exploited during the past two decades; so much so that evidences and arguments have come to assume an unfortunate familiarity of phrase and conventionality of form. The public has, to a regrettable extent, become insensible to the oft-repeated appeals of educational workers, very many of whom have, in spite of themselves, become reconciled to what has appeared to be an inevitably tragic situation in that section of our educational organization occupied by the rural school. The chiefest of the responsibilities of this newly created rural-school committee will be, I take it, to re-establish the rural school in the public conscience, and to chart for the workers in and for rural education one or more new paths by which the rural school may be brought to a higher level of social resultfulness. For who among us would gainsay him who declared that the country school no longer, save in a few isolated and conspicuous instances, either receives or is entitled to that quality of intelligent public confidence that must

underlie its life? The people of our states must be aroused to the point of demanding a new bill of rights for the public schools of the countryside.

II. *The pathology of the rural school.*—It may be safely asserted that a diagnosis of the present conditions of the rural school, divested of all that is of merely incidental, personal, or local significance, will show conclusively that the various ills and weaknesses of the school are due primarily to lack of proper and sufficient nutrition. *The rural school is anæmic.* Instead of supplying the food for the development and vitality of this all-important institution, we have endeavored to cure it by telepathic remedy and to stimulate it into effective activity by preaching a sort of sentimental idealism. The rural school, notwithstanding the momentous changes that have come into our twentieth-century social life, is still one of the major organs of our social body. To keep it healthy, to cause it to perform its functions economically and effectively, it must have the proper nourishment. No amount of public chorusing or of rhetorical phrasing as to the past and present glory of the country school will take the place of the sufficient food of dollars.

III. *The financial remedy.*—The rural school of tomorrow and the next day will be no better than the rural school of today unless our country communities and our states set themselves consciously and intently to the task of bettering the financial foundation of the rural school. This means much more money than has hitherto been considered necessary for the production of effective educational results. It means the tapping of new springs of support. It means more ultimate economy. The index of reform is not to be found in the reconstruction of administrative machinery or in the establishment of new schemes of supervisory control, or in the revamping of courses of study, or in the formulation of *pro forma* requirements for pupils or teachers.

The financial problem of the country school is not now one of the equitable distribution of available state funds. We know the methods by which the existing resources may be best and most justly distributed. The thorogoing study of Cubberley[1] has shown us the way of utilizing to the best advantage the revenues now derived from various sources. The fact that an insignificant few of our states make the most out of their present school incomes is of minor consideration. From the scientific and statistical side the solution of the problem of distribution has been presented. The new problem is to cause the people to realize that rural-school reform means more than the juggling of funds.

IV. *The financial campaign.*—If I have rightly interpreted this portion of the task before the Committee on Rural Schools, it is to discover ways and means that will guarantee to every rural school a constant sufficiency of support. Just what this sufficiency should be is fairly well established today in the standards of educational economists and engineers. We know within the reasonable limits of variability what sum should be expended on a rural school, whether it be a one-room, two-room, or ten-room school, in order that there may be a fair chance of producing those results that approximate the needs of our civilization and typify the idealism of our education.

One aspect of this extraordinarily complicated problem seems clear, and that is, that the country school must become far more than it is today a *state* school. Organization, support, control, and supervision of the school on the basis of minor territorial jurisdictions have been proved the country over to be serious hindrances. Local self-government in rural education, that deceptive platitude of the politicians on and off the platform, has meant an insidious growth of local self-complacency, itself the greatest obstacle to the logical and necessary development of the school. The problem of rural-school improvement is one of rural-school funds; the problem of rural-school funds involves a widespread campaign among the people of our different states so that it will be realized that the interests of each rural school are of the deepest concern to each community and to each inhabitant of the state. Unity of educational purpose is bound up with unity of fiscal support.

[1] E. P. Cubberley, *School Funds and Their Apportionment.* New York, 1905.

TOPIC: BY WHAT STANDARDS OR TESTS SHALL THE EFFICIENCY OF A SCHOOL OR SYSTEM OF SCHOOLS BE MEASURED?

A

GEORGE D. STRAYER, PROFESSOR OF EDUCATIONAL ADMINISTRATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

In discussing the problem of standards or tests for measuring the efficiency of schools or school systems, I come before this group not to make a *report* of the Council committee appointed to consider this problem, but rather to call your attention to the possible line of work which the committee believes may result in the production of a significant report at a later meeting. I shall be guided in what I have to say by the discussions which have already taken place in a meeting of the committee, but I must accept entire responsibility for all statements which are made which may be called in question by anyone in this audience, or by any member of the committee.

The demand that we measure the product of our schools, or that we evaluate methods which are employed in the organization, administration, and supervision of education, is not new, nor is the practice of measurement in this field a matter of recent development growing out of the demand for efficiency. There has never been a time that the schools have not been subject to criticism and to the demand that they measure the results achieved in order to discover how little was accomplished. Ever since there have been teachers, there has been some system of measurement of the result of the training given in the schools. The possibility of accurate measurement in the field of education has, of course, increased greatly with the development of scientific work in this field and with the growth of the teaching profession.

We are not satisfied today with the rough approximation which sufficed a generation ago. We are beginning to define more accurately the ends which we seek. From the study of psychology and from the development of the method employed in social sciences, we are able to evaluate, more accurately than was formerly possible the achievement either of individuals or of large groups. Indeed it may be claimed that the possibility of error decreases in proportion as the number of individuals in the group to be studied is increased. Even in the field of business administration we are making certain advance. One hears continually of scientific management, and in the school field, no less than in other situations demanding organizing and administrative genius, the result of investments is being accurately measured.

It is worth noting in this connection that the advance which has come in scientific work in education is due primarily to those who have devoted

themselves to the study of education as such. It is true indeed that those who have made the most notable contributions have been trained in the fundamental sciences of psychology, sociology, and economics, but the contribution has come primarily from the educational psychologists, from the educational administrator, from the educational sociologist, and not from those who deal with the fundamental sciences without relation to the special problems of education.

Your committee appointed to study the problem "By What Standards or Tests Shall the Efficiency of a School or System of Schools be Measured?" had no difficulty in deciding at its first meeting that its peculiar function was to be found in bringing together the methods employed by students of education, whether serving as administrators or in any other capacity, in order that the practice of evaluation as found at present thruout the United States be made available for all who are interested in educational measurement. To this end the committee plans to invite the co-operation of school superintendents and of all other students of education who have attempted to measure the results of our educational practice. It has been thought well to have prepared an annotated bibliography of all the studies in the field of investigation with which we are concerned, to be submitted as a part of our first report. It is hoped that in this way it will be possible to make available for any student of education the methods which have been successfully applied and the results which have been secured by those who have done significant work in the field of educational measurement.

In inviting your co-operation the committee plans to call your attention to at least three distinct fields in which measurement may be expected: first, with respect to business administration of schools; second, in the field of organization and administration of the more strictly educational activities; and third, in the measurement of the achievement of individual pupils, classes, or schools, in the subjects commonly taught. Under the head of business administration, the type of building erected in relation to its cost, the rating of buildings at present in use, the standardization of equipment and of supplies are among the more important subjects to be considered. In the field of organization and administration of the educational activity of a school system, investigations concerning the attendance of children, involving a measure of the efficiency of the enforcement of the compulsory education and child labor laws, the amount of attendance in relation to the proficiency of children, the effect of part-time classes, the results secured from vacation schools and from a longer school day, are to be considered. Another important inquiry in the field of organization and administration is found in a study of the classification and progress of children thru schools, involving the effect of size of classes, the amount of retardation, acceleration, and elimination, the results of individual instruction, or of special methods of classification and promotion, the value of classes organized to take account of individual differences,

whether of intellect or physical condition. The results achieved by medical and dental inspection, the evaluation of the product secured from special types of schools, from differentiated courses, or from other special educational activity, such as lecture courses, recreation centers, playgrounds, civic centers, and the like, are topics receiving the consideration of progressive administrators thruout our country. The attempt to measure the success of the teacher's work, analyzing the qualities which make for successful teaching, the rating of teachers, and the evaluation of the agencies employed in training teachers in service may also be considered in the discussion of tests of organization and administration.

In measuring the achievement of individual pupils, of classes, or of schools, in the subjects commonly taught, it is to be remembered that a beginning has already been made in the direction of deriving scales or units of measurement. The work of Rice and of Cornman in spelling; of Stone and of Courtis in arithmetic; and of Thorndike and Ayres in the derivation of a scale of handwriting is familiar to all. It is to be expected that scales or units of measurement in other fields will be added in the near future. Of course no one claims that these methods of measurement include everything that is demanded by way of a measuring stick of our educational activity. It will not be denied, however, that this beginning is no less significant than were the beginnings of measurement in other fields. There was a time when the units employed to measure time, distance, volume, and the like were clumsy tools as compared with our modern, more accurate measures. Of course the imperfection of these units was never a valid argument against their use, but rather an incentive to those who worked to perfect them. Likewise in the field of education, the beginnings which have been made enable us roughly to evaluate certain educational products and they suggest the necessity for further work in this field. However adequate or inadequate the measures commonly applied are, it is nevertheless true that every administrative or supervisory officer is constantly passing judgment with regard to the success of the work done in his system of schools in each of the subjects or groups of subjects taught therein. Your committee will endeavor to bring together and to make available for students of education the methods which have been most successfully employed in measuring the ability of children in school subjects.

In submitting to students of education a classification which suggests fields in which the evaluation or measurement of educational activity is desired, it is the expectation of your committee that each superintendent or student of education will submit for our consideration the methods which he has employed in his situation in measuring some actual educational product. We believe that investigations which are not commonly known, and methods of measurement which have been successfully employed, can in this way be made available for all who are interested in this field of inquiry.

In calling attention to the fact that there are three main fields of investigation, namely, business organization, educational administration, and scientific measurement of the achievement of pupils, classes, or schools, your committee is not unaware of the fact that these three types of inquiry are mutually interdependent. Any complete survey of a school or system of schools will of necessity involve inquiry with respect to each of these types of educational activity. No greater mistake can be made than to think it possible to investigate a school system with regard to a single element or type of activity while disregarding other related factors upon which the special function investigated may depend. For example, one might discuss at length the progress of children thru school and be absolutely unfair to the system under investigation. The question of progress involves, of course, the provision in the way of buildings which permits of classes of reasonable size on full time, as over against inadequate provision for housing children which may require a large percentage to spend only half-time in school. The percentage of promotion in any school system cannot be disassociated from the standard of achievement which is required of children who pass from grade to grade. Any adequate study of retardation must take account as well of the qualifications demanded of teachers, the salaries paid to them, the provision which is made for textbooks, apparatus, and supplies, the organization of special classes for the backward, the defective, and the delinquent, without any one of which elements the school may not hope to achieve thoroly satisfactory work. In any other field, whether of business administration, of educational organization and administration, or concerning the achievement of pupils, it will always be necessary to consider each problem, however distinct it may seem, in its relation to the whole school situation. Your committee will be interested in whatever attempts have been made, or whatever methods have been employed to measure any activity or phase of school work. It cannot fail at the same time to call attention to the fact that the investigation of a small part of the management or of the product of a school system will of necessity lead to a false view of the school situation, and may result in overemphasis upon some one phase of school activity which may in the long run prove injurious rather than helpful. For example, the testing of the product achieved in certain phases of work in arithmetic may result in overemphasis upon this work in the schools. It will be necessary in order to safeguard against such mistakes to derive standards which shall take account not only of the product secured, but also of the amount of time required to secure these results. Indeed, wherever investigation is undertaken with respect to a single subject, or a part of the whole group of subjects taught, there will be a tendency to slight the subjects concerning which investigation has not been made in favor of those subjects in which results have been measured. In the field of organization and administration, the investigation of the

problem of retardation may conceivably result in an emphasis upon promotion which will be harmful to the best interests of children. The problem of slow progress is not solved simply by promoting 95 per cent of all of the children at each term's end, even tho such promotions may result in a good showing when this particular system is compared with some other with respect to retardation. Partial investigations must at present characterize much of the attempt to measure educational products, and the fact that these investigations do not and cannot tell the whole truth, that they frequently raise the problem rather than answer it, must be kept constantly in mind. We hope, and we believe, that it will eventually be possible to take into consideration, in evaluating the work done by any system of schools, all of those elements which enter into and determine the success or failure of the work done. We hope, thru the co-operation of those who are actually engaged in educational work, to bring together the experience of all, and to organize this experience in such form as to aid in the development of a system or scheme of measurement which will take account of the complexity of the situation with which we deal.

B

EDWARD C. ELLIOTT, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN, MADISON, WIS.

[*Abstract*]

I. *The rural school and the efficiency movement.*—That potent stimulant for the reform of our industrial activities and our social institutions to which the name "efficiency" has lately been given has not yet to any appreciable extent influenced the rural school. This delay is only natural. The public schools of the city have just begun to subject themselves to scientific value-measuring processes; and the rural schools always lag far behind their urban cousins in the adoption of new methods and standards of progress.

Withal, the emphatic need of making a truthful balance sheet of the business of the rural school has been demonstrated in numerous ways. A naïve pride and faith in our educational institutions cannot much longer keep us from confessing that the country school is in grave danger of becoming, if this is not already the case, the shame of the countryside. The *graft* of the city, that baffling obstacle to all civic reform and stability, may be said to be paralleled by the *craft* of the country in concealing the weaknesses of its most fundamental institution—the school.

One-half of the children of the country, notwithstanding the rapid urbanization of our population, still receive their formal education in the rural school—the one-room, isolated school. If our modern notions of social and institutional economy have led us to attempt a scientific evaluation of the processes and results of public education in the city, such evaluation is all the more necessary in the country, with its distinctive problems,

its inborn conservatism and complacency. Our rural industries are, under the pressure of an evolutionary economic necessity, being reorganized and revitalized thru the application of the principles of the economic and natural sciences. The schools of our ruraldom demand for their reorganization and revitalization, even more than do the schools of the urbandom, the employment of our entire stock of scientific procedure in education. This problem is, for obvious reasons, a complicated and difficult one, one that may not, however, be longer neglected; for neglected it is.

II. *The method of rural-school betterment.*—Four years ago, at Washington, during a discussion of the problem of vocational education before the Department of Superintendence, it was suggested that all rational educational reform passes thru four stages—the stage of *stress*, the stage of *investigation* and *experimentation*, the stage of *propagandum*, and the stage of *reorganization*.[1] It was further suggested, concerning these several stages, that the stage of investigation and experimentation was, by far, the most difficult of passage; and that we needed to be in possession of the facts pertaining to industry and children before we could carry on a sane propagandum for a vocational reorganization of our public educational scheme. This generalization as to the mode of our educational progress appears to be thoroly valid when tested by recent events in the industrial adaptation of the public school. Moreover, its application to the rapidly pressing problems of rural educational reform seems to be equally valid.

The country-wide campaign for the betterment of the rural school now being carried on will not be productive of any widespread improvement or intensification of the education of the children of the country regions until there is such careful investigation of existing conditions as will reveal in conclusive and indisputable form the naked facts that are directly responsible for the enervation of the rural school. Today these facts are felt rather than known, and until they are exhibited without bias or higher criticism, there will be no arousing of city and country dwellers to what appears to be a democratic nation's shame. This investigation must be accompanied or immediately followed by experimentation and effective demonstration of what the country school should be to realize our American ideal of a public-school education and to fulfill the human ambition of country boys and girls to live that life of usefulness and contentment which is rightly theirs by heritage.

III. *Rural-school standards of worth.*—While it cannot be denied that we are in possession of mountains of general facts relative to the present worth of the typical rural school, these facts are in general of a character that makes an appeal to the sentimentalist rather than the scientist; more usable for oratory than for convincing argument. Whatever other value these general facts may have, they are in their present uncorrelated

[1] See Edward C. Elliott, "Equality of Opportunity . . . . ," *Proceedings of the National Education Association*, 1908, pp. 159–61.

and undigested form, useless as foundation material for the establishment of new standards of accomplishment. The numerous bulky reports of our various state departments of public instruction represent, with a very few exceptions, waste rather than conservation of scientific effort. In so far as its work becomes concerned with the question of determining the accomplishments of the rural school this National Council Committee on School Efficiency will be able to perform a distinctive service if it succeeds in planning a co-operative scheme for gathering from the entire country the essential facts that underlie a constructive program. There is need of concentration upon specific issues. The existing administrative machinery of public education will not permit the gathering of *all* the facts, *all* the time, for *all* the country, but it is possible by co-operation to secure, one at a time, a few essential facts for the entire country. These facts we do not now have.

There is a generally recognized standard for urban elementary and secondary schools. We need to know the constitution of a standard rural school, and by this standard to develop among our country teachers, school officials, and people a consciousness of the comparative worth of their own schools. This standard rural school needs to exist in reality, not merely in theory. It has seemed to some of us that the recent movements to secure federal aid for agricultural and other vocational education in the several states might better have recognized the principle of indirect, rather than direct, aid in so far as these movements were calculated to better rural schools. The establishment and maintenance by the federal government of one or more demonstration rural schools, both one-room and centralized, in each of our states would render incalculable service for the elevation of the standards of efficiency for rural schools, far more perhaps than direct appropriations in aid. A standard of value in education, whether it be in finance, organization, or instruction, must exist as a living objective value before it will serve to stimulate our people and our educational workers into an active desire to reconstruct the rural school. The layman is as sensitive as the expert to the demonstration of real values. The ordering of these values yet lies before us as one of our great tasks.

DISCUSSION

Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.—Knowing the expected trend of the remarks of most of those who are to speak in the discussion this morning, I have cast about for a few methods of testing our work which are not quantitative and which perhaps will not be discussed by others.

I recognize, as we all do, the great value to come from these splendid detailed studies which are being made for the purpose of showing us how to test the effectiveness of our work. But there are also certain different signs in which we may read our success or failure as teachers or as administrators of schools.

One of these tests, which any of us can apply, is to note whether or not the teachers and pupils in our schools are experiencing the "joy of life." Every child, also every

teacher, has a right to be happy; if he does not enjoy his life and his work, something is wrong somewhere. The school ought to be so conducted that the children in it can be comfortable and happy. Their work should not be unpleasant nor should the conditions under which it is done be such as to make them feel that school life is merely a grind. The schoolroom should be characterized by sunshine, material and temperamental. The work of the teacher also should be comfortable. Such a definite setting-forth of the things which are expected of the teacher should be made that he will be able to know when he is accomplishing, with reasonable success, those things which are expected. Such an atmosphere should surround the teacher's work that he may be sure of wise leadership, sympathetic counsel, and firm backing in those things which are right. If the teacher's work were so arranged and directed that he might have more of the joy of life, we should have fewer worn-out or broken-down instructors of youth.

We may test the effects of our teaching also by noting the bearing of our pupils upon the streets and in their common intercourse with each other and with their elders, and their bearing toward strangers. Any observing person knows that the attitude of children toward the inquiring stranger differs greatly in different cities; that it differs also in different parts of the same city. And this difference in bearing toward persons with whom the pupils come in contact is different where home conditions, general intelligence, and other contributing causes outside the school appear to be the same. Who that has had years of experience in supervising schools has not seen the attitude of the pupils in some school change from the rude and boisterous and inconsiderate to a manner of courtesy and consideration, and back again to carelessness and rudeness, as the management of the school in that neighborhood has changed? A very good test of our success, in at least one direction, may thus be read in the street manners and bearing of our pupils.

It is possible for us to judge, without quantitative measurements, whether the pupils and the teachers are doing their best—working up to their capacity; getting out of themselves the best that is in them. A popular writer tells of his experience on the first day of a trip into the woods. In starting, his guide took a load of camp supplies and equipage weighing one hundred pounds upon his shoulders; the writer was given fifty pounds to carry as his share. They tramped until well along in the afternoon when the town man became so tired he thought he could not go farther, and demanded of the guide that they camp where they were. The guide explained that a few miles farther on was a splendid camping-ground which he had selected for the night. The man on vacation summoned up his courage and tramped on two or three miles farther, then sat down on a log and declared he could not and would not go another step but camp must be made where they were. The guide said nothing but picked up the fifty-pound pack his employer had been carrying, set it on top of his own load of one hundred pounds, and started out for the point he had selected for the evening's camp. The man who had thought himself completely exhausted was so ashamed by this turn of affairs that he seized his fifty-pound pack from the guide, put it on his shoulders, set his teeth together, and tramped along without another word until the camping-place was reached.

This lesson may be taken to heart by many a teacher and many a pupil. We think we are doing all we can many times when the fact is we might do 50 per cent or 100 per cent more. It is an important part of education for each person to learn to do his best. Some attention to this point will show whether or not we ourselves, as teachers, are doing our best, and whether or not our pupils are doing all that they ought to do.

We may judge our success also by noticing whether or not our pupils remain in the school and show some interest to receive all its benefits; or whether, at the earliest possible moment when the law or the parental authority will permit, they leave our instruction to enter upon some other occupation. That school system out of which the children are dropping in too great numbers after they reach the upper grammar grades, that system in which too small a number of them continue their studies into the high school, is not

measuring up to the proper standard of success. It may be that the parents need to be educated as to the value of the education given in school; it may be that the boys and girls themselves need to have shown to them what they are losing if they leave school at an unnecessarily early age; it may be that the school itself needs attention; that its methods are not such as to attract and hold the pupils, or that the subjects taught and the manner of their presentation are not such as to appeal to the interest of pupils or to cause the boys and girls to feel that school studies are of value. Whenever in any school the tendency among pupils is to drop out, to leave the school before receiving all of its benefits which they might remain to get, the attitude of the parents toward the school, the estimation in which the children hold the school and its exercises, the methods of conducting the school and presenting the subject-matter, and the subject-matter of study and the exercises of the school, all should be carefully scrutinized to see where the trouble lies.

The school may also measure its effectiveness by the attitude toward life which its pupils have after leaving the school. If they are found to be selfish, content with low standards of life and low aims; if they are indifferent toward their neighbors and lack the kindly interest and readiness for kindly service which all members of the community ought to manifest toward each other; if they are indifferent toward the civic welfare of the city or state in which they live, and think of the government only as a possible means of exploitation or of advantage to themselves, instead of feeling that they are citizens, charged with responsibility for the welfare of the other dwellers in the municipality or state; if they are indifferent when movements for the public weal are forward: then the school has failed in its highest opportunity. We, as teachers, are advertised by our product; unless the school implants in the majority of its pupils good ideals of conduct and of life, a good disposition toward fellow-men, and a high standard of duty to, and responsibility for the welfare of the state, we may know that something, a very important part of our opportunity as teachers and school administrators, has been lost sight of or that we have failed in its realization.

Charles H. Judd, director, School of Education, University of Chicago, Chicago, Ill.—One very common method of judging the efficiency of a school is to observe the work which the students do in the advanced school to which they pass after leaving the lower school. Teachers in the fourth grade are constantly judging the efficiency of the third grade by students who come from the lower into the higher class. The same method of judgment is applied by colleges to the high schools and by high schools to the upper grades of the elementary schools. The business of educational science is to refine this method of judging efficiency and make it more exact and explicit.

Since the college is judging the high school by the character of the students who come from the high school, an effort should be made to gather as complete a record as possible of the work which is done by students in both of the institutions involved in this judgment. The importance of a complete record is illustrated by the fact that many colleges judge high schools adversely when students fail in their college courses. Sometimes the failure of a student could have been anticipated by a recognition of the grade which he took in the lower schools. When the high school sends a low-grade student to the college with a definite statement of the fact that the student took low rank in his high-school courses, it is not to be expected that he will excel in his college work. Recent elaborate investigations have made it perfectly clear that a low-grade student in the high school is likely to continue to do poor work after he goes into the higher institution. The question which should be asked in all these cases can be formulated as follows: Does a student maintain in the school to which he is promoted the same relative rank that he held in the lower school? That is, does the student who stands in the highest third of the high-school class succeed in maintaining himself in the highest third of the college classes, or does he

fall to a lower position? If he falls to a lower position, an adverse judgment of the school is so far justified. If in a number of cases the experience is repeated, all of the students from a given high school failing to carry on in college the standard type of work, the justification for an adverse judgment is complete. On the other hand, if a college finds that students are able to rank higher in college classes than they did in the high school, it is time for the college to consider whether its standards are as high as those of the high school from which the students came.

Information necessary to answer questions of this type cannot be collected by a single institution. Students from a given high school scatter to a number of different colleges. There should be co-operation between the colleges and the high schools, and information of this sort should be collected on a large scale by some central committee or bureau. If such centralized information were at hand, it would be possible to judge accurately the standard of both the colleges and the high schools. The North Central Association of Colleges and Secondary Schools is collecting information of this type. If the National Council or the Department of Superintendence could be interested in the same kind of information, it would be possible to develop the plan so as to include elementary schools as well as secondary schools and colleges. Several progressive high-school principals have shown by studies of this type that it is possible to judge the efficiency of the elementary schools of a city with great accuracy. Mr. Miller of the Kansas City High School was able to select the elementary schools in his city which were doing the most efficient work in different departments by a study of the students who came from these schools into the Kansas City High School. In the same way, Mr. Carter was able by a careful study of the Milwaukee records in elementary and high schools to show the relative efficiency of the different elementary schools in that city.

A comparison of institutions thru information of this sort is much safer than a comparison of institutions thru the opinion and judgment of individual supervisors. Furthermore, the people who are judged by this kind of information are very much better satisfied that they have been treated with fairness. There is no conflict between the ordinary methods of school supervision and this suggestion for a more accurate and scientific study of the same problem.

Z. X. SNYDER, president of the State Teachers College, Greeley, Colo.—

1. RESULTS OF AN EFFICIENT SYSTEM

1. A school system to be efficient must so train and develop the individual that he shall enter into his various stages of life normally at the proper time and be self-supporting when he enters life at his majority, be able to earn a living, to accumulate some property, and to own a home. In short, the system must individualize him.

2. An educational system to be efficient must train the individual thoughtfully, feelingly, and actively to support our institutional life, as the home, the school, the state, with its manifold activities in its development; and to help and enrich the mass—the social group. Again, the system must socialize him.

3. A system of schools to be efficient must train the individual to have a stable attitude in all human endeavor—to have an intellectual balance, to be sympathetic in his life, and to be a person of action.

4. An educational system to be efficient must provide for all conditions of the human family, the weak, the strong; the young, the old; the fortunate, the unfortunate—indeed all states and conditions.

5. An educational system to be efficient must rest on the fundamental eugenic principle that after an individual is in existence, he must be protected, helped, and the best made of him for life's sake.

II. SOURCES OF IMPULSES APPEALED TO IN ATTAINING THE RESULTS

1. The first is the biological impulse of self-preservation. Out of this impulse come all the elements of individuation—self-support, accumulation, opinion, self-determination, self-assertion, self-perfection, self-realization, etc.

2. The great and fundamental impulse, also biological, to which the former impulse leads is that for preservation of the species. Out of this come all the elements of communication, mutual aid, socialization, helpfulness, the larger civilization which enfolds all humanity, etc.

III. ELEMENTS FOR SECURING EFFICIENCY

The evaluation of experiences: as idea, fact, belief, truth, motive, ideal, action, etc., is found in the following:

1. The potential value of an experience is its expectancy. Out of this come anxiety, thought, hope, impulse, passion, heart, and life for the realization of the experience. The school system in its organization, management, and in its teaching—indeed in its life should aim to develop a high potential.

2. The actual value of an experience is the realization of the expectancy, to attain which the individual acts—in which he works up the experience into a richer and more complex experience by thinking and doing.

3. The efficient value of the experience is measured by the amount of service rendered to self and to others and to the institutional life. It is measured by how much aid, by how much kindness, by how much sympathy, by how much thought, by how much action has entered into the realization—has entered into the real and living situation.

IV. ORGANIZATION OF THE ELEMENTS

1. The stage of development in which the child or the person is living must always be taken into consideration in order to attain the results in testing the standards of efficiency.

2. There must always be an arousing, stimulating, and organizing of the experiences of the person or persons at the particular stage of development that there may be the highest potential, highest actual value, and the highest efficient value for service.

3. The individual's life must be taken into consideration in the presentation of the organized experiences.

4. Indeed the curriculum, or material or stuff that is used, must therefore grow out of the life of the individual at his particular stage of development and back into it to enrich it in the complex individual and social situation.

V. SOURCES OF STIMULATION OF EXPERIENCES, ETC.

1. The organism itself affords the foundation or basis for stimulation as indicated above, both in self-preservation and in the preservation of species. The individual is organically selfish and should be. The fibers of the roots of our civilization find its nourishment in these impulses.

2. The environment, the complex of things round about the person, all serve in the organization of the experiences or life of the individual. It is a process of nature and nurture.

3. Again, I would say that the source of material should grow out of the life within and the life without the individual—his organic, subjective life and the environmental life.

VI. SUMMATION OF STANDARDS OF TESTS, ETC.

1. The individual must live in every stage so as to enter fully, readily, and righteously into the life about him. The standard of the test of a system is such as must bring

about this sort of living. The little child of six has just as real and important life as the adult has in his stage.

2. The system must be such as to enable the individual to realize on his experiences should he have to drop out of the school at any time. He should be able to do something to preserve himself and others in accordance with the stage of development in which he was and is now living. He should be able to earn a living and to add to the sum-total of human happiness in civilization. He should be co-operative. The test of efficiency of a system must be such as to bring this result.

3. The test is not to prepare for complete living which seems to contain an element of futurity, but to have complete living now at the particular stage of development in which the individual is living. Life is a series in which each preceding term is in each succeeding term.

4. The test of a system is not in examinations, not in recitations, not in deportment cards, not in the number sent to higher educational institutions, not in the ability to think, even. While all these aid, the final and crucial test is the reaction in adult life in character, in pure living, in thought, sentiment, and deed, summing up into the statement of the poet, he lives most who thinks most, feels most, and does most.

LOTUS D. COFFMAN, supervisor of Training School, Eastern Illinois State Normal School, Charleston, Ill.—Advancements in education are made by varying the emphasis upon the problems of education. Philosophers seldom see the entire field of education in its wholeness or the movements within it in their reciprocal relations. Advancement rather is made by throwing the emphasis at one time upon one problem and at another time upon another. Each new problem tends to be raised in our class-consciousness to a place of importance all out of proportion to its real worth. This leads many an enthusiastic reformer astray and in its reaction causes the conservative and judicious administrator to cling more tenaciously to those things that have been sanctioned by a long experience. Nevertheless, child-study, correlation, recapitulation are but the catchwords of movements that have at one time or another dominated our thinking.

Just now we are being urged and spurred on by a widespread movement to reduce every type of productive activity to scientific management. Educational leaders here and there, following in the wake of social sentiment and social pressure, have caught up the movement and are now fairly engaged in the attempt to rationalize old standards and to discover new ones. This movement or emphasis, like all the others, will leave us a modicum of useful information. More than that, it is likely to leave as its distinctive contribution a method of work for refining the standards now being secured and for discovering new ones. We believe that the laws of education and the central tendencies of the facts of administration are discoverable in nature. That they will shift with time, place, race, age, and the like, every student of sociology knows, but that these variations are in accordance with law, every student of science believes.

It must not be understood that we have had and have now no standards in education. It is nevertheless true that such standards as exist have been secured thru the laborious processes of trial and error. Many of them have been arrived at and have been practiced so unconsciously that they have become a part of the *mores* of the teaching population. Many a young superintendent who has not become inoculated with these rather habitual modes of practice has spent much of his comparatively brief career wool-gathering, grasping at straws as he groped blindly about in his efforts to get hold of something that would enable him to rate his teachers and to judge the work of his schools. On the other hand, some superintendents of long experience who are thoroly saturated with our class traditions, have looked upon the liberalistic views of recent reformers as unnecessary, if not anarchistic. Their attitude has been almost that of "Let well enough alone"; with a field fairly teeming with problems to be solved, they see none. They act toward a multitude of situations as schoolmasters have always acted.

Another type of standard is that which is created by definition. Such standards are usually registered in laws. Many of them grow not so much out of a breakdown of practice as out of an effort to make conditions more ideal. Both of these factors are, to some extent, always present when we seek to create by law standards for controlling, managing, and rating schools. There is some dissatisfaction with existing conditions, a sense of maladjustment, a failure of the old practices to work; this in itself is cause enough to warrant the establishment of new standards. But more frequently our dissatisfaction causes us to project our experience into the future and we set up idealized standards.

Standards by definition have already covered a multitude of subjects. They have to do with the collection and distribution of school funds, the certification and salaries of teachers, the accrediting of high schools, the kinds of discipline permitted, the number of years children must attend school, the number and kinds of subjects that must or must not be taught. Most of these topics have been legislated upon.

In addition to those standards which have been established by legislative enactment, there are still others that have been formulated by organizations, operating under private initiative, or by educational institutions acting under a co-operative agreement. Such institutions and agreements as the Sage Foundation, Carnegie Foundation, the Bureau of Education, the North Central Association of Colleges and Secondary Schools are examples of what I mean.

Again, we speak of one school as excellent and another as good, of one as superior and another as inferior; we know that such terms refer only to common-sense judgments as to what is true of the schools as a whole. It is quite impossible that a given school is excellent in everything, good in everything, or bad in everything. Any attempt to define such general expressions as these or such other expressions as "third-grade ability," "fourth-grade facility in numbers," "more than average skill in the drill subjects," and the like, have certainly been moves in the right direction. However, much of this work, valuable and indicative as it is, has had the misfortune of being based upon ratings given by observation. It is true that these observations in many instances have been made by people of reputed expert training. Nevertheless, mere observation has certain fundamental weaknesses and faults as a method of arriving at the truth. That observation and individual opinion have been great factors in securing progress, in education as well as elsewhere, no one can deny; but just now, in the physical and social science fields they are being superseded by more refined methods. Once we were satisfied with a statement if we knew who said it, now we want to know what the evidence is; the *ipse dixit* of the leader was once sufficient, now he must give us the facts if he wants a hearing. I know very well that desire for facts and evidence is looked upon by some as educational heresy. It is not heresy; it is a more rational attempt at getting at the truth. It is not heresy; it is an attempt to define some of the lump judgments of current thought. It is not heresy; it is an attempt to render more scientific educational procedure. Those of us who believe in standards and scales arrived at thru experiments and tests that can easily be duplicated, do not criticize those who sought truth thru observation and opinion. We only ask them to sympathize with the work of a comparatively small group of serious-minded students of education who are studying its problems quantitatively. What could be more unprofessional than an attitude that sneers at any attempt to arrive at the truth!

The difficulty in handling problems that lie within the field of teaching method is found in the fact that they deal directly with human nature. This makes them far more subtle, complex, and variable than those that pertain to school finance. It was but natural that we should give attention to the number of children per teacher, the number of recitations per teacher, the wage scale, the heating and ventilation of buildings, and the like, before we focussed our attention upon the more intimate and vital problems of actual instruction. We know more about the material conditions for teaching than we do about the act of teaching. The evolution of standards has always been from the obvious

to the less obvious. Quantitative measurement took hold of those things first that were most concrete; the apparently more intangible things were regarded as qualitative. But that which was qualitative at one time, as our methods were improved became quantitative at a later time. The fact that we have no proper units and scales with which to measure some things is no evidence that we may not have later on. The fact that we haven't shows the field which will yield the most fertile results. The number and amount of things which we still speak of as being purely qualitative is to some extent a measure of our present state of ignorance with reference to them.

Variable quantities can be measured by employing the statistical technique. Many special studies will be required to secure units and scales that will be accurate and serviceable in practice. In no other way can we advance so rationally from our present rather unsatisfactory position. The difficulties involved in making such special studies will not deter the serious student from attempting them. Such studies as those of Erdmann and Dodge, Huey, Dearborn, Ruediger and Judd of reading; of Rice, Cornman, Pearson, and Wallin of spelling; of Rice, Stone, Brown, Courtis, and Bonser of arithmetic; of Thorndike of handwriting; of Hillegas of composition; of Cubberley, Strayer, and Elliott of school finance; of Thorndike, Ayres, Greenwood, and Blan of retardation and elimination; of Keyes on the progress of children thru the grades; these and many others have put us far on the road both to the establishment of certain facts and to the establishment of a method of work.

These subjects have tentatively established a number of important standards. Before these, however, can be accepted as being of ultimate worth, many of the studies must be duplicated. In no other way can norms be finally established. What we need is a scientific spirit that will induce us to accept the work already done and to try it out. Any enterprising superintendent could compare his school with those described in the studies referred to by using the same methods that were employed there. This would be far better for education than for him to be constantly trying to do something unique.

A mastery of such studies as those to which I have just referred will familiarize one with the different ways of measuring variable quantities. Perhaps a few words explaining it may not be entirely amiss here. It is obvious that people vary as to stature, weight, length of fingers, cephalic index, blood pressure, pulse rates, power of discrimination, ability to add, to spell, to memorize, to write compositions. Variation is not a phenomenon that is restricted to any single individual nor to any group of individuals. It is one of the two facts needed to compare one individual with another or with himself at a previous time, or one group with another group, or with itself at some previous time.

The very presence of variability presupposes the other fact needed in making comparisons. Differences mean difference from something—and that something is the type, which is statistically expressed by the average, the median, or the mode, as the case may be.

These two facts may be made more concrete by borrowing and adapting an illustration from Galton. Suppose we have a funnel-shaped receptacle filled with wheat. Below it is a regular series of vessels of the same shape and base, symmetrically arranged in a row. If the wheat is allowed to escape, an equal quantity of it does not fall into each of these containers. Rather it is distributed according to the law of chance. This law has such mathematical accuracy that we can predict with reasonable certainty the character of the distribution. Those vessels immediately beneath the funnel-shaped receptacle will be filled fuller than those next to them, the amount contained in the vessels grows less and less, as we pass from the center vessels outward until at either end there are vessels containing only a few grains. If the top of each column of wheat is connected by a curved line, we have exactly the same kind of curve as that secured by stature measurement, i.e., the normal frequency-curve. A curve of this character would be secured by plotting the length of men's feet, the batting averages of a baseball team, the deviation from

a bull's eye at target shooting, the number of spots turned up in twenty throws of the dice, the ability of a class to multiply mentally one three-place number by another, the speed of a class in reading, the efficiency of a class in handwriting, the imagery of a class in studying a poem, the location of a school among a system of schools with reference to any quality considered.

Now we cannot predict where any single grain of wheat would fall. We can only predict as to what will be true of the distribution of the wheat in general. But the chances are high that any single grain of wheat will fall nearer the middle and they are exactly even that it will fall above or below the middle position. Individuals tend to cluster about the average, or the median, or the mode, i.e., about the central tendency. No description of any group is complete unless the whole extent of the deviation in each direction from the group average is shown.

Any school or system of schools that falls above the group average for any particular characteristic is in the better one-half of the schools, and any school or system that falls below the group average is in the poorer one-half of the schools. The total range or distribution can be broken up into fourths or quartiles, so that one can tell whether his school as to the ability or item measured falls within the best fourth, the second best, the next to poorest, or the poorest.

There are certain other facts pertaining to the measurements of relationship which I shall not take the time to discuss. They have been amply treated in several very good books, dealing with the statistical procedure. I refer to Thorndike's *Mental and Social Measurements*, to Elderton's *Primer of Statistics*, to Yule's *Elementary Theory of Statistics*.

Such a plan as that which I have but briefly described, does not supply us with a scale which measures differences in merit as multiples of some unit. So far, we have only one such scale. I refer to Thorndike's scale for handwriting, an account of which will be found in *Teachers College Record*, March, 1911. This scale is based upon more than twenty thousand ratings of specimens of handwritings. The samples finally selected were progressively arranged on the basis of these ratings in equal steps. For example, sample 4 is as much better than sample 3, as sample 3 is better than sample 2. By using this scale the ratings that a classroom teacher gives a pupil's writing have a definite meaning. She can compare one pupil's writing with another or with his own performance at some earlier time. The scale may be used to show the actual rate of improvement of the individual, of the room, of the school. The values of different methods used in teaching handwriting may be effectively determined by this scale. A superintendent will use it to measure samples of handwriting from individuals, classes, cities, groups chosen for grade, age, sex, method of teaching, or length of time devoted to writing, or to measure any other variable involved in instruction in handwriting. Even business men will find it a convenient instrument to determine the rating of the quality that they want.

Other such scales are being constructed now. Words in spelling could be rated in the same way as to their difficulty. So also could there be a standard series of problems in arithmetic for each age or each grade. The important dates or facts in history or in geography might be put to scale in the same way. Selections in reading could be rated in the order of their value or of their difficulty. There is no end to the scales that might be determined were there but enough men interested in the scientific aspects of education to prepare them.

The time when we shall have standards for testing schools determined by thoroly scientific methods is approaching. In the meantime, we must continue to trust for many things to the judgments of our wisest leaders; we must continue to create standards by definition; and we must continue to reduce those things thoroly agreed upon to the plane of customary action. I feel, however, that we shall grow most progressively and sanely by the application of the laboratory and statistical method. Introspection can never in any true sense give us an applied science. The real advance must come from an acquaintance with the experimental technique.

SECRETARY'S MINUTES

CHICAGO MEETING

OFFICERS

President—CHARLES H. KEYES, president of Skidmore School of Arts..Saratoga Springs, N.Y.
Vice-President—WILLIAM M. DAVIDSON, superintendent of schools.....Washington, D.C.
Secretary—ROBERT J. ALEY, president of the University of Maine.....Orono, Me.

FIRST SESSION—SATURDAY FORENOON, JULY 6, 1912

The National Council of Education met in the Gold Room of the Congress Hotel, Chicago, Ill., and was called to order at 10 A.M. by President Charles H. Keyes.

The president appointed a committee, consisting of Robert J. Aley, president of the University of Maine, Orono, Me.; J. Stanley Brown, principal of Township High School, Joliet, Ill.; and Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., to report the revised constitution of the Council to the Board of Directors of the National Education Association.

The president appointed John R. Kirk, president of the State Normal School, Kirksville, Mo., to take the place of E. E. Brown, chancellor of New York University, New York, N.Y., and J. Stanley Brown, principal of the Township High School, Joliet, Ill., to take the place of Augustus S. Downing, first assistant commissioner of education, Albany, N.Y., upon the Committee on Membership. The appointments were for this meeting only.

"The Final Report on High-School Preparation of Students for Normal Schools" was then presented by David Felmley, president of the State Normal University, Normal, Ill.

The report was discussed by John H. Phillips, Birmingham, Ala.; J. Stanley Brown, Joliet, Ill.; E. A. Jones, Waterville, Ohio.; Thomas A. Mott, Richmond, Ind.; Homer H. Seerley, Cedar Falls, Iowa; John W. Cook, De Kalb, Ill.; W. A. Brandenburg, Oklahoma City, Okla.; John R. Kirk, Kirksville, Mo.; and C. P. Cary, Madison, Wis.

SECOND SESSION—SATURDAY AFTERNOON, JULY 6, 1912

E. T. Fairchild, state superintendent of public instruction, Topeka, Kans., presented the "Report of Progress of the Committee on Rural Schools." (See papers of St. Louis meeting.) Those engaging in the general discussion were: H. B. Brown, Valparaiso, Ind.; Adelaide S. Baylor, Indianapolis, Ind.; A. J. Matthews, Tempe, Ariz.; J. Y. Joyner, Raleigh, N.C.; and John R. Kirk, Kirksville, Mo.

Upon motion of Robert J. Aley, Orono, Me., the president was asked to appoint a committee to formulate a proper tribute to the memory of Julia Richman, New York, N.Y.

This matter was referred to the following committee:

A. E. Winship, Boston, Mass. J. Y. Joyner, Raleigh, N.C.
Nebraska Cropsey, Indianapolis, Ind. John MacDonald, Topeka, Kans.
W. J. Kerr, Corvallis, Ore.

THIRD SESSION—SATURDAY EVENING, JULY 6, 1912

In the absence of President Keyes, Joseph Swain, president of Swarthmore College, Swarthmore, Pa., presided at this session.

The following report of the Committee on Membership was unanimously adopted:

JAMES Y. JOYNER, Raleigh, N.C., *Vice-President*.....Term expires 1915
ELLEN C. SABIN, Milwaukee, Wis., Executive Committee.....Term expires 1915
AUGUSTUS S. DOWNING, Albany, N.Y., Committee on Membership...Term expires 1915
CARROLL G. PEARSE, Milwaukee, Wis., Committee on Membership..Term expires 1915
A. C. NELSON, Salt Lake City, Utah, Committee on Membership....Term expires 1913
JAMES M. GREENWOOD, Kansas City, Mo., Committee on Investigations and Appropriations.....Term expires 1915
FRANK A. FITZPATRICK, Boston, Mass., Committee on Investigations and Appropriations.....Term expires 1915
PAYSON SMITH, Augusta, Me., Committee on Investigations and Appropriations.....Term expires 1915

MEMBERS

TERMS TO EXPIRE IN 1918

Ella Flagg Young, Chicago, Ill., to succeed herself.
Edwin S. Monroe, Muskogee, Okla., to succeed himself.
W. H. Elson, Cleveland, Ohio, to succeed himself.
John W. Carr, Bayonne, N.J., to succeed himself.
Edward C. Elliott, Madison, Wis., to succeed himself.
Grace C. Strachan, New York, N.Y., to succeed herself.
Adelaide S. Baylor, Indianapolis, Ind., to succeed herself.
Carleton B. Gibson, Rochester, N.Y., to succeed himself.
C. G. Schulz, St. Paul, Minn., to succeed himself.
Oscar T. Corson, Columbus, Ohio, to succeed himself.

TERMS TO EXPIRE IN 1913

Fannie Fern Andrews, Boston, Mass., to succeed Wm. E. Hatch, New Bedford, Mass.
John F. Sims, Stevens Point, Wis., to succeed A. S. Draper, Albany, N.Y.
Bird T. Baldwin, Swarthmore, Pa., to succeed Frank E. Parlin, Cambridge, Mass.
A. D. Yocum, Philadelphia, Pa., to succeed C. A. Herrick, Philadelphia, Pa.
Clem Hampton, Tallahassee, Fla., to succeed W. M. Holloway, Tallahassee, Fla.

TERM TO EXPIRE IN 1914

Katherine D. Blake, New York, N.Y., to succeed Julia Richman, New York, N.Y., deceased.

TERM TO EXPIRE IN 1915

L. E. Wolfe, Memphis, Tenn., to succeed E. E. Brown, New York, N.Y.

TERM TO EXPIRE IN 1916

D. H. Christensen, Salt Lake City, Utah, to succeed Anna T. Smith, Washington, D.C.

TERM TO EXPIRE IN 1917

E. E. Bass, Greenville, Miss., to succeed John W. Abercrombie, University, Ala.

By unanimous vote the Council adopted the following resolutions on the death of Julia Richman:

On June 24, Miss Julia Richman of New York City, a distinguished member of the National Council of Education, died in Paris, after ten days of heroic effort to rally from an operation for appendicitis.

Miss Richman was for many years an eminent leader in educational advance. She fitted herself for this leadership as a grade teacher and principal in New York City before her promotion to the district superintendency.

With superb courage she was the first to successfully defy all political bosses and force them to keep their hands off educational affairs.

With noble consecration she inspired children from the humblest homes so that in a district where no child had ever gone above the sixth grade she saw more than 2,500 in the seventh and eighth grades, with many in the high school.

With deepest human sympathy, she led to the establishment of the first school hospital for crippled children in connection with the public schools of a great city.

With keen patriotic insight she insisted that public schools could do and should do

for all children everything that was best for them by way of physical, intellectual, industrial, social, and moral training.

Therefore, in view of all that Miss Richman was as a noble woman and brilliant leader, be it

Resolved, That we learn of her death with sincere regret; that we remember her life and work with genuine satisfaction; that we appreciate the privilege and honor of having had her as one of our number, and that we here highly resolve to take renewed devotion to that cause for which she gave the last full measure of devotion.

"Educational Progress of the Year" was presented by J. A. Shawan, superintendent of schools, Columbus, Ohio. Those engaging in the general discussion were: Grace Strachan, New York, N.Y.; A. E. Winship, Boston, Mass.; Amelia Fruchte, St. Louis, Mo.; E. G. Cooley, La Grange, Ill.; Walter R. Siders, Pocatello, Idaho.

The Council adjourned at 9:50 P.M.

ROBERT J. ALEY, *Secretary*

PAPERS AND DISCUSSIONS

FINAL REPORT OF THE COMMITTEE ON HIGH-SCHOOL PREPARATION OF STUDENTS FOR NORMAL SCHOOLS

In preparing this report your committee sent letters of inquiry to 120 state normal schools. Some of the questions asked could not be answered accurately without considerable investigation. Others could hardly admit of precise answers in any case. Possibly for these reasons replies were received from only 41 institutions, yet these replies were from 25 states representing every section of the country and present a body of fact and opinion sufficiently uniform to justify, we believe, the main conclusions presented in this report. It should be clearly understood that this report deals only with conditions affecting those state normal schools whose students are largely or entirely high-school graduates.

It appears that thruout the country normal-school faculties are generally not satisfied with the quality of the high-school preparation received by most normal-school students. The organization and work of some high schools is entirely satisfactory; many individual students from other schools show excellent preparation. Our conclusions are necessarily based upon the average product. There is no disposition to indulge in wholesale condemnation of the high schools. Their principals and teachers must often bow to conditions that they cannot control. We propose merely to analyze the high-school situation from the standpoint of the normal school, and to suggest such changes as seem desirable and practicable.

THE FUNDAMENTAL DEFECT

The chief defect of the high schools from the standpoint of this inquiry is that in their aim, their curriculum, and their methods of instruction, and in their spirit and life they are too largely dominated by so-called

college traditions and ideals. It is true that our state universities and a few under private administration have recently broadened their entrance requirements so as to leave the tributary high schools more free to shape their programs of study with reference to the needs of the whole community, rather than of a particular class. Yet the inner life of these universities, their spirit, their atmosphere, their ideals, their rating of the relative respectability of studies, have as yet undergone little change. The smaller institutions and especially the women's colleges of the East, which draw students from the entire country and exert an influence quite out of proportion to the number of students affected, tenaciously adhere to the standards of thirty years ago. It is also true that many high-school principals, courageous, dominant, and progressive, have developed high schools whose instruction and life are quite in harmony with the modern spirit. Yet the fact remains that in many of our larger cities the older high schools have accepted fitting young people for college as their chief function. Commercial high schools and manual training high schools are established to care for those who want a secondary education not determined by the prejudices or ideals of the professional or literary class. This separation of our young people of high-school age into two classes, the one dominated unduly by leisure-class ideals, the other by utilitarian considerations, is most regrettable in a country whose public-school system is maintained to nourish the ideals of democracy.

In the smaller cities and towns the practical aim of the high school too often is to keep on the accredited list of the university. In many high schools this dominating idea determines the subjects in the narrow curriculum and controls the work done in every one of them. This control looks in the direction of further work in the branches in higher institutions of learning and to indorsements of the standards set by them rather than to the clear comprehension of the subjects as related to the student's life and environment. Hence it follows, as stated by the Massachusetts Commission on Industrial Education, that the best energies of thousands of our young people are devoted to studying the language, the literature, the wars, the politics, the religion, the customs, and superstitions of peoples for fifteen centuries dead, while the knowledge that is needed to earn a living, to discharge the duties of citizenship, and even to appreciate the world in which we live must be picked up largely outside of school and by methods more or less irregular and ineffective.

THE TEACHERS

The conscious aim of the high school determines the choice of teachers. If the one function of the high school is to fit for college, what more sensible than to secure as teachers men and women who have been thru college and know what preparation will be needed? The insistence upon a high standard of scholarship is altogether praiseworthy. The error lies in not

recognizing the equal need of professional preparation, and in the particular sort of scholarship prized in high-school teachers. It is the knowledge of the classroom rather than the knowledge that flows from the arts and affairs of the practical world.

From this cause it results that the high-school teachers are nearly always college graduates, usually young college graduates with little or no professional education or ideals, no adequate comprehension of the meaning of education, of the purpose of the school, or of the physical or psychological laws that must govern all learning and should govern all teaching. To such teachers, "to get an education" is to complete a college course, and the function of the high school is to fit boys and girls for college. Naturally they imitate their own teachers and bring the methods of college and university into the high-school classrooms, diluting them to suit young students and lecturing much. Hence the instruction is scholastic, bookish, abstract, with little articulation with the environment or reference to the needs of modern life.

THE REMEDY

The first need of the high school is a change of aim. It must confront the actual needs of life as found in shop and store, in farm and home. This does not mean that all instruction shall be vocational; the physical, social, and cultural needs of men and women are facts of life. But it does mean that we must assess with greater care the actual educational value of every study in the curriculum, of every detail of organization and method, and conduct our schools in such a way as to secure the maximum of useful knowledge, skill, power, appreciation, and character. To make such assessment of values is no easy matter. We lack a universally accepted standard. We are likely to be misled by prejudice, by habit, by traditional doctrines of formal discipline intangible and unprovable. Subjects are of unequal value for different individuals and for different localities. No weighing of educational values can be universal or final.

Then our organization and instruction must be in close articulation with the local environment; partly because the natural objects, industrial processes, and social organization there must provide the concrete basis for vital instruction in many subjects; partly because the mastery of that environment is the proper sort of education for most of the students. In spite of the numerous exceptions in our restless American life, it is still true that most of our students will live in the locality where they were reared or in a similar environment elsewhere. The high school must not assume that it is the sole educational agency, its curriculum the sum of all worthy knowledge, and adopt a policy that prevents young people from acquiring arts and knowledges that must be learned in youth if learned at all. Thus if the high school does not offer instruction in instrumental music, it must find a way to supervise and credit good private

instruction and count it for graduation. If the student of domestic science has regular home duties in this field for which the school instruction affords direction, some means should be found for accepting such laboratory work, rating the excellence of the performance, and crediting the same on the high-school record. The school must not set itself up as the one institution that shall bend everything else to its calendar and needs.

Such a change of aim is not easy to bring to pass. The university looms large above the horizon of our country town. If the rival village ten miles away has had its high school accredited, we cannot afford to live in manifest inferiority. Our school board scurries about, telegraphs for the university high-school visitor, and begs him to name the terms on which the coveted relation may be secured.

In every country town there are a few influential citizens of the well-to-do, or professional classes who wish to prepare their children for college. Disliking to send their boys and girls away to boarding-school, they bring all possible pressure upon the school board to place their high school on the accredited list. It is not easy for a school board to resist this pressure even tho itself holding a more rational view of the function of the high school. For these and other reasons, the smaller high school (and it is from the smaller high schools that most normal-school students come) feels obliged to shape its program and organize its work with reference to college preparation.

A SPECIAL PROGRAM OF STUDIES

The second need of the high school is the change in the curriculum—in the interest not merely of future teachers but of all the students. In the small high school where but one program of studies is taught, it should not be the program prevailing at present. If the best single curriculum is arrived at, it will not be a poor curriculum for future teachers, for it will be a curriculum providing a large place for vocational studies and adapted to the cultural needs and resources of the community.

The high school holds in our educational system a place that is all its own. Its justification is that it is adapted to the immediate needs of the community. It does well when it does the best it can under the limitations imposed by the financial resources at its command. It is not a fitting-school as its chief function, as it is an end in itself rather than a station whence transportation is taken elsewhere. The universities, the colleges, the normal schools, and the technical schools must adapt themselves to these conditions, rather than expect perfect preparation for their specific field.

Our strictures upon the dominant ideal of the older type of high school must not be taken as evidence that we are seeking to substitute the dominance of the normal school for the dominance of the university. The normal school as such has no "needs" of its own. Its sole function is to make the public schools more efficient. Their ideals must be its ideals.

In the large high schools where various courses are now provided to meet varying tastes and vocational needs certain studies may properly be recommended to all who look forward to the vocation of teaching. In every state in the Union there are more teachers than there are physicians, lawyers, or engineers, and the professional life of the individual teacher is much briefer. More high-school graduates enter teaching than any other calling with a recognized demand for special preparation. The larger high schools provide special courses for future lawyers, bankers, and engineers; why not for future teachers? It is by no means necessary or even desirable that all elementary teachers should have followed the same high-school program—any more than that all the sixth-grade teachers in a city should be of the same relative ability in the various branches taught. The school system is all the richer because of the individual talents of each. Nevertheless, as appears below, there are certain arts and knowledges of high importance to all elementary teachers for which an adequate foundation should be laid in the high school. All intending to become elementary teachers should include these studies in their high-school curriculum, for a two-year normal-school course cannot afford time enough to master them.

The question arises, Do high-school students decide to become teachers early enough to affect their choice of studies? The general opinion is that they do not, but I am not sure that this opinion is in many cases based on actual investigation. In one large normal school 23 of the 26 women of the faculty had decided to become teachers before they were 16. A majority of the students in the same institution had decided at that age. In another state normal school all the high-school graduates were polled with this result:

37 per cent had decided to become teachers before entering the high school.
4 per cent during their first year.
4 per cent during their second year.
14 per cent during their third year.
22 per cent during their Senior year.
19 per cent after graduation.

Of 27 women in the faculty of this school 8 had decided to become teachers before they were 10 years old; 9 others before they were 16. Of the 23 men in the same faculty 10 had decided before they were 16.

From this it appears that by the middle of the high-school course enough students have chosen to become teachers to make it worth while to offer any needed courses. This number may be largely increased if high-school teachers take a lively interest in the future of their students. An observant teacher cannot fail to note among his pupils those who have a marked fitness for teaching. A word of suggestion or encouragement at the right time will often decide the matter. It ought to be somebody's business to advise young people as to what they shall do after leaving

school—somebody's who knows the young people and knows the world. A wise teacher often can do this better than the parents themselves.

From the reports received it appears that the high-school curriculum thruout the country contains substantially the same elements but varies somewhat in the relative time devoted to the different branches of study. The standard graduation requirements are usually 16 units, each unit being a year's work in a subject with daily recitations. An approximate composite of the various programs actually completed by the high-school graduates in the normal schools reporting is as follows:

English, including grammar, rhetoric and composition, English literature, reading and public speaking	3.8 units
Foreign languages—Latin, Greek, German, French, and Spanish	3.4 units
Social science—history, economics, civil government	2.6 units
Mathematics—algebra, geometry, trigonometry, and arithmetic	3 units
Physical science—physics, and chemistry	1.2 units
Biological science—zoölogy, botany, and human physiology	.8 unit
Earth science—geography, physiography, geology, astronomy	.6 unit
Music—vocal or instrumental	.2 unit
Drawing, design, manual training	.3 unit
Agriculture and household science	.1 unit

In the East foreign language has a larger place, often constituting a full third of the curriculum. In the South the ancient languages and mathematics receive larger relative attention. In the Middle West and also in the Mountain and Pacific states larger attention is paid to the biological sciences. Drawing and design seem best developed in New England. Agriculture and the household arts are just beginning to appear in ratable amount in the high-school curriculum of a few students.

The normal-school faculties reporting are pretty well agreed that for future elementary teachers there should be less foreign language, less algebra and geometry, more arithmetic, more biological science, more geography, more of drawing and the other manual arts, more music, reading, and public speaking than we ordinarily find in the high-school course.

Our students before completing the normal-school program are usually of the same opinion. In an Illinois normal school, 162 students, all high-school graduates, were recently asked how many would change their high-school courses if the course was to be begun with their present estimate of educational values to the future teacher. Fifty-six per cent (mostly Seniors) would change the course; 44 per cent (mostly Juniors) would not; 45 per cent would take less Latin, 11 per cent less German, 18 per cent less mathematics; while 39 per cent would take more natural science.

The following program is suggested as an elective program in our larger high schools—not as a finality, but as a better balanced assortment of our present high-school studies than is commonly chosen by future elementary teachers.

Three years' work in English.
Four years' work in science.
Two years' work in mathematics.
Two years' work in history and civics.
Two years' work in Latin, German, or French.
Two years' work in industrial lines.
One year's work in music and drawing.

VITALIZED INSTRUCTION

The third need of the high school from the standpoint of the normal school is that the instruction in the various branches be more thoro and more vital. There is a general complaint that high-school students are poorly taught, that they cover too much ground with little drill and real assimilation; that they have low ideals as to what thoroness and accuracy mean in the preparation of lessons; that their work is largely memorizing statements they do not understand and soon forget; that they do not know how to study; that they are poor in vocabularies and seem to lack words to express ideas with which they must be perfectly familiar. The fundamental difficulty seems to be, as pointed out before, that their high-school study is largely a thing apart from their daily life experience. They do not properly comprehend, appreciate, or assimilate the material they deal with.

Thus English is the medium of instruction. Habits in the use of English are forming in every classroom. Hence if students are to use the English language effectively with correct idiom and pronunciation, it will be brought to pass most economically, not by adding more courses in English, but by paying due attention to these points in every class. Every effort made to secure precise and orderly thinking not only aids in the knowledge of the particular branch but makes for better English as well. The inverse statement is equally true. Every teacher should be consciously a teacher of English.

Teachers especially need to be good readers, they must speak with ease and effectiveness and in pleasing tones. They should be practiced in story-telling and platform speaking. They should have read widely in literature, largely in children's literature, and have committed thousands of lines to memory. The normal course is altogether too short for this accomplishment. It should have begun in the lower grades, and have continued all thru the years of the high school.

The sciences should be so taught that the student will feel every day that his health, his happiness, and his success in life depend upon the truths they contain. They should explain natural phenomena and industrial processes, fuels, foods, sanitation, and the rules of right living. Altho the sciences came into our high-school and college programs largely as a protest against the old classical education with its emphasis upon formal discipline, its dependence on authority, we have gradually come to teach

them as if their chief value lay in their method; in experiments to rediscover what the student knows in advance, in the verification of physical constants, and in the solution of endless problems in energy and motion. For the same reason biology should deal with the visible forms that surround the student and which should appeal to him every day, rather than with the microscopic world.

The mathematics of the high school needs thoro revision. No other branch is so universally studied as algebra and with so little real profit. The time devoted to it should be reduced to one year, its topics limited to those that generalize and extend arithmetical processes. For the ordinary elementary teacher imaginary roots are as incomprehensible and useless as the fourth dimension. The work should abound in concrete problems. Investigations that do not begin in concrete problems and end in concrete applications should be omitted. A year of plane geometry, with many practical arithmetical problems involving geometrical elements, should suffice in this branch.

History should undertake to answer this question: How did our present institutions come to be as they are? Only in so far as they answer this are events or the lives of men worth knowing. Civics is a study of rights and duties in society. It deals with the co-operative efforts of men in the state to secure justice, protection, healthful conditions, education, and sundry other things of everyday value. It should emphasize function rather than structure and machinery. No study in the curriculum is of higher value than economics. Without it the organization of modern industry cannot be understood or rightly adjusted. It deepens the student's interest in life, and awakens his public spirit as no other subject can do. But to be of value it must be taught in terms of the student's environment.

Where the normal-school course is only two years in length, it is best in the high school to omit foreign language altogether and include in the last two years a study of the common branches—not a review in the sense of going over grammar-school textbooks, but a fresh study of these subjects from a higher standpoint, a study that will enlist the best energies of advanced students. A year of physical and commercial geography will set forth the conditions, purposes, and methods of human industry. Grammar is rarely appreciated by the fourteen-year-old. It really belongs to the Senior year of the high school.

PROFESSIONAL TRAINING FOR TEACHERS

The fourth need of the high school is a different standard of preparation for its teachers.

Thirty years ago mature and scholarly teachers who had served an apprenticeship in the grades were frequently promoted to the high school. They brought with them a knowledge of children, thoro familiarity with the common branches even in their higher reaches, skill in teaching. To

teach the younger classes in the high school such teachers are needed today. Instead of these we find in the smaller high schools, from which most of our normal-school students come, a shifting corps of young, inexperienced, and untrained teachers, college-bred young women usually with little definite knowledge of what goes on in the grammar school. The break between the grammar school and the high school is too pronounced. The pupil finds a new organization, new branches of study, new teachers with new methods of instruction. Teachers and pupils share in a mutual misunderstanding.

All high-school teachers need as thoro professional preparation as elementary-school teachers. They need the same knowledge of the laws of the developing life of children and youth, of the psychological processes involved in all learning, of the principles and methods of teaching and school management, of educational aims and educational values, of the relation of the school to other social institutions. Many superintendents testify to the fact that whereas elementary teachers usually enter heartily into the work of reading-circles, teachers' meetings, and other means of professional growth, high-school teachers stand aloof. They will co-operate in literary clubs and scientific societies, but they do not seem to realize the existence of a great body of doctrine that informs and illumines the teaching art. They are thoroly committed to the dogma, so widely prevalent in university circles, that anyone who knows a subject can teach it.

We therefore hold that in selecting high-school teachers, school authorities should give due weight to professional education and training as well as to character and scholarship, and that teachers of extended experience, acknowledged skill, and ample scholarship gained thru private study should not be excluded from the high school because of the lack of a degree. There is a good deal of superstition in the reverence paid to degrees. A degree is not a sacrament. It is not the outward and visible sign of an invisible and inward spiritual grace. There are teachers of slender school advantages who have, thru private study, reached a finer and truer scholarship than is attained by many graduates of our colleges and universities.

It is notorious that the significant advances in science and the arts have not been made by men within college walls. The greatest teachers of men have often owed little to the schools. May it not be well to make some sort of provision by which the Franklins, the Faradays, and the Edisons of the educational world may bring their ministry to the teacher's desk.

Altho this report has set forth what your committee believe to be common shortcomings of high schools, it must be not inferred that we hold the high school chiefly responsible for poor work done by graduates of normal schools. The normal schools are not universally what this report demands. These institutions need to examine their own organization, curricula, faculty, and methods. Their teachers are too often chosen because of

their degrees rather than because of their personal power and skill in the classroom. Often these teachers have had no real professional training; their experience as teachers before obtaining their doctor's degree is sometimes a record of failure. The actual classroom work in some normal schools is, outside of their training schools, but little better than that of high schools or colleges. The teacher recites most of the time. Pupils are nagged and growled at in pretty much the same old way. In many classes pupils are passive recipients rather than active participants. The science and art of questioning is wholly disregarded. May not the high schools retort to our strictures that they are greatly handicapped by the poor instruction given by normal-school graduates in the elementary school? A further inquiry into the question, How may normal-school faculties improve the quality of their teaching? may properly supplement this report.

Respectfully submitted,

Committee

DAVID FELMLEY, Normal, Ill.
JOHN H. PHILLIPS, Birmingham, Ala.
J. STANLEY BROWN, Joliet, Ill.
J. A. SHAWAN, Columbus, Ohio
HOMER H. SEERLEY, Cedar Falls, Iowa
JOHN R. KIRK, Kirksville, Mo.
WILLIAM M. DAVIDSON, Washington, D.C.

DISCUSSION

JOHN H. PHILLIPS, superintendent of schools, Birmingham, Ala.—It will no doubt be noted that the report has been considerably modified since its preliminary statement was heard at San Francisco one year ago. With a few minor exceptions the report appears acceptable.

Its strenuous tone in dealing with the dominating influence of the college over the high school might lead the casual reader to infer that the committee would like to substitute the normal school for the college and the university as a dominating influence in secondary education. Of course, this is far from the committee's intention, and a modification in the form of statement may remove this objection.

The influence of the college is doubtless too dominant today in many of the smaller high schools, altho it has been greatly modified within the last few years. We must remember, however, that no matter whether the dictation comes from the college or the normal school, the response must come from the people who after all control the high school. The demand of the college for high-school preparation in Greek has long since failed to arouse any response in the high school; "college influence" has not been dominant enough to restore Greek to its former place in the high-school course.

I am heartily in favor of placing more emphasis in our secondary courses upon the practical subjects mentioned in the report, and believe that every college should recognize such topics in its entrance requirements. Indeed many of our colleges now give credit for any work credited for graduation in any good high school. In speaking of vocational studies, however, we are in danger of restricting the term "vocational" to too narrow a definition. It may not be difficult to show that, for many people at least, the study of Latin may have an important vocational value; especially is this the case where a com-

fortable and practical knowledge of good English is desired. The value of the latter is properly emphasized; it is difficult to see why the former may not be taught in such a manner as to become the means of good English instruction.

It is true that in some of our larger cities, the older high schools have assumed as their function the fitting of students for college, while the newer manual-training and commercial high schools in the same cities are set apart for those who do not expect to enter college. The inevitable result is a social cleavage inconsistent with the spirit of our democracy. These different types of schools should be combined; the student in the college preparatory course needs the industrial and vocational atmosphere and vice versa. We do not wish to discourage college preparation in our high schools, nor do we think it desirable to create a chasm between the two classes of students by their unwise separation.

The report has been written from the standpoint of the best type of normal schools in this country. But it must be remembered that the number of normal schools whose academic curricula are equivalent to those of the college are very few. It is not surprising therefore that high-school teachers are required to be college graduates rather than normal-school graduates. It will be conceded that the academic scholarship accepted for graduation in a large number, if not in the majority of the normal schools of this country, is but little in advance of that required for graduation in our best high schools. Our high schools should be commended, therefore, for adopting for their teachers the highest standard of scholarship available. But "college graduation" is too restrictive. College education or its equivalent, together with a good professional course, would be a more adequate statement of this indispensable high-school requirement.

I feel also that the report in some of its statements is altogether too strenuous in dealing with the alleged weakness of the high school. In this respect the critical attitude of the normal school is so obviously similar to that of the university that comment is unnecessary. Both should remember that neither is quite so democratic as the high school, and that neither is likely to respond so readily to the heart beat of the great public, upon which all must depend for their patronage and support.

With these slight modifications I am prepared to indorse the report.

J. Stanley Brown, principal of Township High School, Joliet, Ill.—Dr. Felmley has made many changes in his report since the St. Louis meeting, but he continues to adhere to the statement that the conscious aim of the high school is to satisfy the college requirement. Later in his discussion he states that this conscious aim is very largely confined to the smaller high school, but that from these smaller high schools comes the largest percentage of normal-school students. The conscious aim of many of the small schools is doubtless what President Felmley has stated, but the aim is in many cases a rebellious aim even tho conscious.

Many high-school principals and superintendents would gladly modify their courses of study so as to meet more nearly the needs of their communities, if the economic conditions of those communities permitted such action. It is a well-recognized fact that it costs much less to teach Latin, mathematics, English, history, modern language, than mechanical drawing, manual training, domestic science, stenography and typewriting, physics, chemistry, biology, and other laboratory studies. For this reason there has been an unconscious clinging to the single curriculum composed largely of these studies whose cost is less than other studies.

It has so happened that many of the college-entrance requirements, especially those of the earlier type of institutions, were determined at a time previous to the introduction of the newer studies. This we think an important element and one which must not be lightly passed over when we consider the studies of the curriculum and the number of courses offered by the high school.

Another question which President Felmley raises is with reference to the time when

high-school students decide to become teachers. An investigation would lead us to think that a very considerable percentage make this decision before entering high school. He passes over the fact that while the boys and girls in the eighth grade have decided to be this or that, or to do this or that before entering high school, during their first year of the high school they decide to do something else, and probably during their high-school course they will have reached three or four different decisions. We think that these conditions are probably normal and that most boys and girls in high school, and even in college, change their aim and purpose from time to time. An investigation among adults or those in middle life in any community will reveal the fact that there have been from two to six changes in occupation from the age of fourteen to the age of twenty-five. This fact makes it all the more difficult to prescribe absolute limits in choice of work during the high-school period, and would seem to indicate that a general course of study, not specifically designed for one wishing to enter normal school, would be best.

We agree with President Felmley that vitalized instruction is very necessary in the high school. We would suggest, too, that this might have equal value in the normal school and college.

We are in hearty agreement with what President Felmley says about professional training for teachers and shall gladly welcome the time when the universities and teachers' colleges, from which source must come the high-school teachers, shall give an abundance of professional training for such high-school teachers. It is certainly true that the high-school teachers need as thoro professional training as any other type of teachers and that boards of education ought to give due weight to such professional preparation. Other things being equal, we prefer high-school teachers who have had at least enough training to get a degree from an institution of good standing.

All in all, the report seems to us to be a valuable report and after the few changes which we have indicated have been made, we shall gladly indorse it.

Homer H. Seerley, president of Iowa State Teachers College, Cedar Falls, Iowa.—It seems necessary to say a word in defense of the main propositions of this report. There can be no desire for the normal schools to wish to dominate the high schools, thus taking the place of the universities in the attempt to improve the school system. The true normal school does not believe in domination, it believes in freedom for each class of schools; it would leave the high school free to perform to the best of its ability its highest service to society. There could be no benefit from such domination, even if it could be accomplished. The whole object of this discussion is to ascertain from the point of view of the normal school, in what respect the high school could contribute to the making of competent teachers. No other vocation takes as many high-school graduates annually as does teaching. That being so, it seems reasonable that the normal schools are justified in asking the high schools to remember what a large contingent of their enrollment will prepare to be teachers and give them a little better preparation than the prescribed courses permit. This is certainly a reasonable proposition and no one should take exception to the chief attempt of the committee.

All of these kinds of schools have a place, and a useful place at that, in the system of education, and none of them should be disparaged or repudiated. The normal schools are statutory institutions. They were created by the states to meet an urgent demand. They did not originate as colleges and universities have, as their province was determined by law. The work they try to do is very difficult. No other kind of an educational institution has passed thru such a fire of criticism. Yet their history of development, improvement, and expansion is one of the most interesting phenomena of the past fifty years, an evidence of the fact that they must be consulted as to educational policies, since they have right claims upon the high school. Their development is exceeded by only one other kind of educational institution, the high school. It is marvelous what fifty years have done in the erection of massive buildings, in the remarkable equipping, and in the improving

of the teaching force of the high schools. There is no prouder chapter in our educational history than that of the high school.

The normal school has no controversy with the college or the university but it has the right to ask these institutions to do their part toward helping perfect a school system. The normal school goes to the college or the university for its teachers and its experts. There is no other place to go, as talent and scholarship and capability are essential to the normal-school faculty and those higher institutions attract such persons and train them for excellence and usefulness. Hence the normal school respects and esteems the university for what it can and should do for civilization. These several institutions are not in each other's way, they are not contestants in the great field as they are coworkers and co-operators for the common good. There is more than room for them all and they should each display the spirit and the attitude of workers for a better time with better results in the education of the children and the youth.

JOHN W. COOK, president of Northern Illinois State Normal School, De Kalb, Ill.—Dr. Phillips objects to the verdict of these normal-school students with regard to their high-school course, on the ground that they are not qualified to pass a discriminating judgment. His objection would be valid were it not for the fact that many of these students have been teachers for several years and are not immature and inexperienced as he regards them. Instead, what they have to say should be received with genuine respect. Not only have they done the practice work required of them in the course of study, but many of them have such maturity and experience as to enable them to come to just conclusions respecting the value of the ordinary curriculum in the high school when looked at from the point of view of the prospective teacher.

I find myself quite thoroly in accord with Dr. Felmley in the presentation of his case. It is an admirable piece of work and ought to have a decided influence in the liberalizing of the high-school course. There may be a suggestion of narrowness in beginning preparation for teaching at so early a period but it may be said in answer to such a suggestion that the proposed subjects are perhaps as liberalizing as those would be that are omitted. I cannot quite agree with him in regard to the study of Latin. I am convinced, however, that there should be a material change in the methods of instruction in that subject. I find that the average high-school graduate, with an experience of four years in the study of Latin, has very little acquaintance with the etymology of our English words derived from that language. It must always be true that the study of words will form a large part of any school curriculum. It is easily possible to make the study of Latin contribute immensely to the power of the student in dealing with his mother-tongue. The early work seems still to be devoted to the acquisition of an acquaintance with construction at the expense of the content, and the significance of roots. If the shade of Julius Caesar should enter the classroom and observe the ordinary processes employed in teaching his *Commentaries* he would doubtless ask himself, "Was it for this that I conquered Gaul?"

I should like to add to the curriculum suggested by Dr. Felmley a thorogoing study of reading—ordinary reading. At least one semester, of two or three periods a week, could be used most advantageously in rigorous thought analysis and equally rigorous training in the selection of suitable forms of expression for the ideas contained in the text. I am well aware that few high-school teachers seem competent to conduct such exercises. They may fit themselves, however, for proper instruction and the results of such a course of training would be extremely gratifying. A new and unusual interest would be awakened in literature and especially in that fine art of expression in which we are so unfortunately weak. We enlarge upon the value of singing, but as between the possession of that desirable art and the art of genuinely good reading few would be found who would not award superior value to the latter.

REPORT OF PROGRESS OF THE COMMITTEE ON RURAL SCHOOLS

E. T. FAIRCHILD, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, TOPEKA, KANS.

(For report see papers of the St. Louis meeting of the Council.)

DISCUSSION

ADELAIDE STEELE BAYLOR, State Department of Education, Indianapolis, Ind.—While the rural schools and indeed all of the schools of Indiana, as Mr. Brown has said, have benefited greatly by the minimum wage law, yet it has a weakness, in that it does not provide for the experienced teacher. Because of the wages that must be paid the young teachers, this piece of legislation has made the profession very inviting in its early years. But there is no scale established by it, enforcing the payment of minimum salaries to teachers with a longer experience than three years. The scale stops with the third year, and it is possible for teachers of long experience and careful training to receive the same wage as those who have been in the profession but three years. Consequently a surplus is found among those entering the profession, but there is a deplorable scarcity of mature, experienced, able men and women. These have dropped out for more lucrative employment.

All schools have suffered, but especially the rural schools, since the city schools refuse to take the inexperienced teacher and she is forced to spend her first years of teaching in the country. Her heart and interests are in the city. She does not care to remain in the community in which she teaches longer than is necessary to do her required work. If she can return to the city each night, she endeavors to do so.

A vigorous campaign is needed in the interests of rural schools and communities that will make the life so inviting to the teachers, they will identify themselves more largely with the community in which they work.

Consolidation of schools will add to the improvement of rural conditions by increasing the tenure of office and salaries of teachers, and providing commodious, well-equipped buildings in rural districts for the education of the rural boy and girl. But consolidation like all other new movements must be taken up advisedly, and the subcommittee on consolidation, a part of the committee from this body on rural education, must make its investigations and reports, it seems to me, not so much along the lines of argument for consolidation as along those of investigating how schools have been consolidated, under what conditions consolidation has proved better than anything else and under what conditions the schools have prospered more by not consolidating at all.

The members of your Committee on Rural Schools, as the chairman has well said, are not here to discuss the work of the committee, which has had little time for anything but a small beginning, but rather to ask your advice and suggestions for lines and methods to be followed out that the results of their investigations may produce conditions, everywhere in rural districts, as good as those in Indiana—yes, far better than those in Indiana.

EDUCATIONAL PROGRESS OF THE YEAR

J. A. SHAWAN, SUPERINTENDENT OF SCHOOLS, COLUMBUS, OHIO

Progress is not always marked by innovations: New movements are in the direction of progress only as they prove themselves helpful and necessary to the success of the cause to which they belong. In education as in everything else, many experiments are futile and lead to nothing.

Yet he who would seek the truth must try many things. Like the astronomer, he must sometimes focus his instrument thru the open slit, shutting off everything else so that he may see more clearly by concentrating his vision on the one object. There are a few who belong to this class and who are sounding the height, depth, and breadth of many educational principles.

Education is yet in its flux. All truth has not been discovered, all problems have not been solved. The specialist may continue to investigate and analyze, and the administrator continue to enlarge his horizon. By a change of viewpoint, the administrator may find that his neighbor has a vision of truth that he himself never suspected; by another change, a much clearer grasp of the situation is obtained, and so on *ad infinitum*.

It has been and will continue to be the mission of the National Council of Education to afford these different points of view and to declare from time to time what the truth in education seems to be. Truth itself is infinite and unchangeable. We do not see it all at one time. If, like the great planets, it sometimes seems to retrograde, it is no fault of the truth, the apparent motion is due entirely to a change in our own point of view. If in our haste, therefore, and before we have seen clearly we find ourselves moving away from the truth, a back movement on our part would be prudent and right. This has often been made in educational matters and some school systems have found it difficult to recover from their retrograde motions. Eternal vigilance is the price of educational progress.

I am indebted to Dr. E. A. Jones, of Otterbein University, for some valuable facts gathered by extensive correspondence and investigation and used in a recent address before the Central Ohio Schoolmasters' Club and showing the year's progress in the state of Ohio. I take it that this is typical of what might be expected in other states, if time were given to a careful investigation and study of conditions:

PUBLIC SCHOOLS

"The last report of the state school commission shows an increase in expenditures of about $2\frac{3}{4}$ millions over the preceding year; an increase of 54,795 pupils; 28,023 teachers as against 27,841 in 1910; 238 new buildings were erected at a cost of $5,149,062; average salary for rural teachers in elementary schools, $56; and in cities, for men, $88, for women, $67. This shows a slight increase over the preceding year. The number of centralized and consolidated schools is given as 186, a gain of 15 over 1910. Of this number 50 are completely centralized.

"No doubt the introduction of agriculture into so many of our high schools and improved methods of teaching it have had a good effect. If agriculture is taught in a practical way thru school and home gardens, and the field plots, instead of from books entirely, botany will be better taught, physics will be better taught, and perhaps even mathematics may feel the influence.

RURAL SCHOOLS OF OHIO

"Ohio has many excellent rural schools, township high schools, centralized schools, and even subdistrict schools that, in respect to buildings, fine surroundings, superior teaching, advanced methods, and good equipment, will compare favorably with similar schools in other states in the Union. At the same time it must be admitted that there are yet in Ohio a good many rural schools that are a reproach to the state. An examination of the notebooks of our school inspectors will reveal the fact that in many districts there are dilapidated buildings, miserable outhouses, unsightly surroundings, unsanitary conditions, no course of study, inefficient teachers, antiquated methods, and out-of-date textbooks. There is nothing to attract and interest, much less to inspire, the children. Much attention has been called to these backward districts during the last year thru educational journals and the public press. This publicity may have a good effect. It should awaken in these districts a public sentiment that will lead the citizens to elect a board of education that will change these conditions and give to the children the educational rights to which they are entitled. What is needed in country districts is more of centralization, more trained teachers, and an extension of intelligent and helpful supervision until it reaches every township in the state.

"In the statistical report of the commissioner, a great gain is shown in the number of pupils taking manual training and domestic science. In 1910, 39 counties reported 4,023 pupils in manual training and 2,172 in domestic science. In 1911, 59 counties reported 16,236 in manual training, and 12,797 in domestic science."

This indicates to some extent the educational trend in Ohio.

Progress is not measured by the number of new enterprises undertaken. The year just closed has not been specially noted for its new movements in education but in my judgment has been noted for the careful study of those in operation and a cold analysis of the results obtained.

Note the subjects studied by the special committees appointed by this Council and submitted at the San Francisco and St. Louis meetings:

1. The report of the Committee on a System of Teaching Morals in Education, with able treatment of the different phases of the problem by superintendents Brumbaugh, Carr, and Greenwood, in itself has been a most valuable contribution to the cause of education. It was not a new movement but showed thoro study of internal conditions and carefully considered plans for their improvement.

2. The Cultural Element and Economy of Time in Education.

3. The Improvement of Teachers in Service in City Schools: Including: (1) High-School Preparation of Candidates for Normal Training; (2) Needed Adjustment between Secondary Schools and Colleges.

4. Problems Relating to the Health of the School.

Similar subjects have been under discussion by the General Association of the National Education Association and its various departments, to wit:

Our Educational Progress and Improvement in the City, in the State, in the Nation.
Organization as Affecting the Course of Study and Economy of Time.
Various conditions affecting school efficiency, etc.

These were discussed in the Department of Superintendence and indicate the trend of educational thought during the year. But merely to enumerate these topics would take too much time and space. All are intensive rather than extensive—an honest effort to make good in present enterprises rather than to multiply new enterprises.

ELIMINATION

We frequently hear it said that the schools are attempting too much and this may be in a measure true. If so, it should be and will be corrected and this Council should be the great clearance-house where all such problems are disposed of. The setting of standards that may be advanced with our ideals is the greatest forward movement possible.

It is interesting to look back over the courses of study which our grandfathers prepared and our fathers pursued. There is one before me now which was in use in a certain city forty years ago. Note: sixth, seventh, and eighth grades—reading, writing, arithmetic, English grammar, English composition, geography, history, constitution of the United States, algebra, bookkeeping, with memory as the principal faculty developed.

All that has been added in these years has been physical exercises, which come as a relief; physiology, a few minutes once a week; and domestic science or manual training, which occur once a week. All of these have the effect of relieving the tension due to close application to book studies. As an offset to the above additions to school work, has come the studied elimination of obsolete and useless materials in all subjects, particularly in arithmetic, grammar, and geography, and the use of better methods and an appeal to thought. To know what is important and just how much emphasis to put upon certain facts is the truest test of a great teacher.

Everywhere during the past year, the relative value of materials used with the selection of those which are of most worth has been the watchword. True, this is only the echo of what our great leaders have been preaching for a score of years or more, yet, like the thunders reverberating among the summer clouds, it is necessary to keep the educational atmosphere clear.

The study given by our secondary teachers to the essentials in their respective departments also marks substantial progress. The report prepared and printed for general distribution on the teaching of geometry must serve to standardize, at least to unify, the teaching of this subject.

CONSERVATION OF VISION

At the Boston meeting of the *National Education Association* a committee was appointed by the Department of Special Education to investigate and report on the status of the conservation of vision. As the

committee entered upon this work the field rapidly enlarged. The question of artificial as well as natural lighting, the conditions in workshops and factories, ophthalmia neonatorum, in fact, the steps that may be taken to prevent blindness as well as the conservation of vision, all were discussed before the committee.

A lady representing the interests of a body of sewing girls in New York City came before the committee and claimed that the light was insufficient in many shops and factories even to see the eye of a needle, much less to thread it. She thought that a standard of light should be fixed to meet such cases. This was beyond the field of work outlined by the committee, which wished to confine itself to the lighting of schoolrooms, the character of the printed page, and the limitation of work having too much eye-strain.

The work of the committee, however, led about one year ago to the formation of the American Association for the Conservation of Vision which has received substantial encouragement and support from the Russell Sage Foundation.

The conservation of the other senses has been receiving thoro consideration during the year, and a revival toward a careful development of the sense of touch bids fair to serve as a great relief to the overstrained nerves where defective vision and defective hearing obtain.

The passage of the new star, Montessori, across our educational horizon during the past year, as seen thru the magazine telescopes and others, has attracted no little attention. While much that is used by this little Italian teacher is old and of slight value, the emphasis placed upon the individual, the training of touch, and the development of the muscular sense must be of incalculable value, especially to young teachers. I have no doubt that all that is good will be adopted by and adapted to our American schools.

RETARDATION AND ACCELERATION

Compulsory education has forcibly brought to our attention two classes of pupils—those who were compelled to attend school but could not keep up with the average child, and those who could do more than the ordinary grading required. These are problems of economy in school administration as well as affecting the internal workings of the schoolroom. Every group of 35 or 40 repeaters in the elementary schools and every group of 25 or 30 in the high schools calls for an extra teacher, an additional expense of from $500 to $1,000, in one case; and from $1,000 to $1,500, in the other. During the past year this subject has received more attention than any other school problem. Some of the best trained experts of the country have applied themselves to its solution, including the distinguished president of this Council.

It is but natural to look over our own fields of labor in gathering facts to be used on an occasion of this kind. Perhaps the most encouraging facts should come first. Statistics are not complete for the year just closed,

but for the year 1910–11, 410 pupils, or 2 per cent, completed two or more semesters more than the regular elementary grades to which they belonged. This means an entire school of 12 rooms with an average of 35 pupils to a room. On a basis of $600 to a teacher it also means the saving of $7,200 in school funds. No doubt like results would be found in all cities, and in many the ratio of saving would be much greater.

A few facts on the other side may not be uninteresting.

A study of the causes of nonpromotion for the present year under the new uniform report system shows:

That out of 22,000 pupils enrolled in the first eight grades, 12 per cent were not promoted, 88 per cent were. I am quite sure that a comparison with other cities will show that this percentage is very conservative—it is about the same as that of New York City. Of those not promoted, the causes as reported by the teachers were as follows:

23.7 per cent were due to irregular attendance; 5.7 per cent to physical defects; 8.9 per cent to personal illness; 39.3 per cent to mental incapacity; 22.2 per cent to indifference. As might be expected, the largest number of failures was in the first grade, almost one-fourth of the entire number, which is not of the most serious importance; the eighth grade had the fewest, only about 3 per cent of the whole number of failures; while the other six grades in the order of the size of number not promoted were the fourth, fifth, third, sixth, second, seventh. All tests show that the problems are found mostly in the fourth and fifth grades, followed closely by the third and sixth. Most large cities, particularly New York, are working out a system for their solution.

Teachers are not supposed to be experts in classifications such as the above, tho their study of the child will lead them remarkably near the truth. In matters of mental incapacity, they cannot be expected to differentiate closely between that which is wholly mental and that which may have a physical basis. The fact is that all of these causes of failure overlap and there should be someone who is specially trained and thoroly competent to analyze them so that each case may be handled in the most practical and economical manner, to the end that the swift may not be held back by the slow, nor the slow, discouraged, fall by the way on account of the speed of the swift. The question then is: To what extent is retardation due to mental, physical, and sense defects which may be improved, if not entirely corrected? We are apt in our enthusiasm to jump at conclusions and to think that we have found a cure for all of our ills and imperfections in some new scheme. While the cure may not be at hand in every instance, yet if a large percentage of the handicaps are discovered and, thru a proper co-operation between the home and the school, corrected, great good will have been done not only for the children concerned but for the future citizens of the community. The greater the reduction of the number of repeaters, the less the cost for general education and the greater its efficiency.

In view of these facts which confront every city school system, what can be done to solve the problem? This question has been raised, in practically every city of the country, beginning with the great centers of population like New York, Boston, and Chicago. Some have made great progress in its answer. That the teacher can and does do much goes without question, but that he should not be called upon to give the final answer to questions affecting mental and physical defects must be apparent to all. Too many problems of that kind already stand at his door. Where action is most needed his non-expert opinion would have least influence, if not indeed be considered an impertinent intrusion, an impression which should not be developed in the mind of the parent against the teacher. The teacher may suggest cases, but the final opinion of an expert is necessary to bring such cases to the serious attention of parents and guardians. When I speak of an expert, I mean an expert, not a person who merely needs the job.

There can be no question that the diagnosis of cases of mental deficiency leads to economy of administration and efficiency by the segregation of those who cannot keep up with regular classes in schools of their own where they can do such work and receive such help as they most need. Every school system has more cases needing such treatment than is realized.

In a psychological clinic made during the present year in our special school for boys, and in two of the individual schools comprised of pupils who were two or more years behind, the following results were shown thru the "Binet test." The 25 boys in the special school were on an average 2.27 years younger mentally than their natural age, tho many of them were quite normal; I do not mean retarded—I mean younger mentally; one of the individual schools, consisting of 21 pupils, averaged 3.13 years, and the other with 20 pupils, 3.95 years younger mentally than naturally, while a few were 5, 6, and 7 years younger mentally than naturally. No doubt some cities have done similar work long ago, but many have not. Such information ought to help in the solution of many problems. A child who is 7 years old mentally cannot cope with one who is 14. It ought not to be expected. Such cases should be segregated and treated differently. But who shall say that this one or that one grades low mentally? Here is where the teacher needs help. Only the judgment of an expert will be respected, a teacher's opinion would be charged to prejudice and a lack of sympathy and patience. Such children have been allowed to lag behind altogether too long. They should be given a helping hand. Some cities have solved this problem, but not all.

MEDICAL INSPECTION

Every American child is in a broad sense a child of the republic. Not that the republic is to assume the responsibility for food and clothing, because something should be left for parents to do; but every child is

entitled to every opportunity for prosperity and happiness which is given to any other child and under as favorable circumstances as the state can offer. The old doctrine, "Every fellow for himself," has become obsolete. A newer and better principle underlies modern patriotism: "Each for all and all for each."

The school has long since passed the stage of being an institution for the acquisition of knowledge alone. While not losing sight of this accomplishment, as we hope, it has boldly given itself to the proposition that education is a preparation for life and good citizenship, and that the school should be life itself for those who attend. The child does not know what he needs. Someone must think and act for him. Parents do not always know what the child needs and too often do not care—in such cases someone must think for them and, if necessary, compel them to act. The child has rights that must be respected and the welfare of the community demands that handicaps be lessened or removed and that the best that there is in each child be brought out.

Perhaps no movement in education has proceeded with greater momentum in the last few years than medical inspection. In 1900, comparatively few cities had considered the importance of this work; in 1905, 55 cities had undertaken it; and in 1910, according to the Russell Sage Foundation, no less than 400 had inaugurated systems of medical inspection, and the contagion has continued to spread. While largely the outgrowth of compulsory education, the systems have been founded on the principle that "sound health is vital to any community as well as to the nation."

That some mistakes have been made, there is no doubt. Standards have not been uniform and vast volumes of statistics have been gathered in many cities that are of no value. In many instances, inspectors have widely differed in their diagnoses of the same cases. All of this is to be expected when we consider the rapid growth of the movement and the lack of specially trained experts to do the work.

Maximum efficiency consistent with the preservation of health is a reasonable school doctrine. In the adoption of the following, this city of Chicago has taken an advanced position:

> Healthy children should be safeguarded against communicable diseases, while parents of defective children should be apprised of the truth sooner, and thus enabled to have their children treated before their weakness becomes chronic.

Each pupil in this city when he enters the schools in September will be required to file a certificate from the family physician stating that he is in good mental and physical condition. Those who do not do so will be examined by the school inspectors and any found to be mentally or physically defective will be segregated from the rest of the pupils. This may seem drastic but there are 350,000 young lives involved, many of whom are housed in all sorts of nooks and corners in this crowded city.

INDUSTRIAL EDUCATION

The report from the National Bureau of Education shows that there has been a marked tendency toward industrial education in city schools thruout the nation the past year. In 1911, the legislatures of nine states enacted laws with reference to some form of industrial training. These states were Alabama, Colorado, Indiana, Maine, Massachusetts, Michigan, Minnesota, Pennsylvania, and Wisconsin. Wisconsin created a state board of industrial education and provided for the establishment of vocational schools and of a school to train teachers in industrial subjects. In Ohio, a beginning too has been made and the year shows commendable progress. Technical and commercial high schools have been established in Cleveland, trade schools and a commercial high school in Columbus, a manual-training high school in Dayton, and we have the co-operative system and continuation schools in Cincinnati. The trade schools in Columbus have been very successful and the board of education has enlarged the scope of the work and will soon be compelled to provide more extensive accommodations.

The departments so far opened are carpentry, cabinet-making, wood-turning, machine shop, electrical shop, and print shop. The school has been in operation for three years. In June last, a class of two was graduated from the printing department, the first class, as far as we know, ever to have graduated from such a department in a public-school system. In connection with the graduating exercises a printing contest was held at which a committee of practical printers acted as judges and spoke in the most encouraging terms of the efficiency of the work. During the summer vacation, all of our trade-school boys have employment in the industrial shops of the city. The co-operative plan has been inaugurated and is proving successful.

Concerning the co-operative system in Cincinnati Professor Schneider of the University of Cincinnati writes:

> The co-operative course has now about three hundred students. During the past year a new engineering building was completed at a cost of $250,000, and with the increased facilities thereby obtained, much larger classes will be enrolled from now on; heretofore we have been restricted by lack of room. Courses are offered in civil, electrical, mechanical, chemical, and metallurgical engineering. About 75 per cent of our students are young men who could not afford to go to a college of engineering except from the money they earn in this course. All of them are high-school graduates with the necessary entrance credits. The interest on the part of manufacturers is increasing amazingly and we have many more requests for co-operation than we can take care of.

The work in domestic science and manual training is taking higher rank every year and the past year has been no exception, as facts already quoted indicate. There is little difficulty now in getting specially trained teachers for this work. This is particularly true in the department of domestic science, and since so much depends upon the teacher—his preparation,

personality, and enthusiasm—the future of these departments is well assured.

AGRICULTURAL EDUCATION

Removal from the farm to the city has become so serious in the past few years as to be viewed as a menace to our American institutions. The object in the establishment of agricultural colleges of the various states begun a generation ago and the adoption of agricultural courses in the common schools of recent date was to promote scientific farming and to check this tendency.

The passage of the Cahill bill by the Ohio legislature in May, 1911, is already having its good effects in that state. The state commissioner of common schools reports that thru the supervisors of that department excellent results are being secured. The textbooks on the subject are so in demand by the parents that the children are frequently unable to get them long enough at night to prepare their own lessons for the next day. The fathers become so interested in the subject that they frequently attend school for the recitation in agriculture, which acts both as a spur and inspiration to the teachers, as well as an encouragement to the pupils. The observance of Arbor Day for 1912 was in some places, it is said, like an old-fashioned Methodist revival.

One very interesting feature of the work is the enthusiasm and skill shown by a number of city girls in preparing themselves to teach this subject. The country girl too often thinks that she knows all about it and so depends upon her native knowledge. The city girl, on the other hand, finds it a new and intensely interesting field. What she lacks in experience she makes up in enthusiasm and her knowledge is fresh and up to date. She learns quickly how to teach this important subject to a farmer's son who is older than herself. The chemistry of the soil seems to her easy and natural and the use of lime as a counter-actant for an acid in the soil, she tests with success, thus giving practical demonstrations of what can be done with certain kinds of soil, multiplying their productive power many fold. Now, if a city girl can do so much, what might not a country girl or boy do?

If the study of agriculture will serve to strengthen the attachment of the sons and daughters of the farmer to the old home and result in greater productive power of the soil, the movement may well be regarded as one of the most important in the educational world of the present day.

VOCATIONAL GUIDANCE

This subject has received a great deal of consideration during the past year. Its importance can hardly be overestimated.

One by one great expressive terms representing the technique in education cross the stage of educational progress, occupy the center for a while, and then take their places in the list of actors to be called upon as the play

progresses. Thus "concentration," "co-ordination," "correlation," "motivation," "apperception," "self-activity," have come and taken their places in the vocabulary of the science of education. Some are used a great deal, some very little, a few have been slow to leave the stage, even after their part in the play was finished, but each has had its place. And now, "vocational guidance" is demanding and receiving our consideration. This is not a new idea but it has received new significance as industrial training has become more prominent. What shall a boy do that he may work out his mission in life? The old idea of putting him to work at anything which came along, no matter what, has not proven itself wholly satisfactory. A boy needs to continue at something and not to seek so many new jobs. Activity in any direction has its value, but activity in the direction of one's adaptability and bent is all important.

Simply because a boy can draw a picture, play a jewsharp, or take an interest in a sick dog is not conclusive evidence that he is destined to become a great artist, a great musician, or a great physician. These may indicate an amount of appreciation or adaptation but the facts are not sufficient for a final conclusion in choosing a vocation.

In our multiplicity of courses, many leading nowhere, there is great confusion in the minds of those who choose, and the line of least resistance is too often the determining factor.

The parent should not be relieved of responsibility in a matter of so great importance, but often himself needs information and guidance. The teacher is already working up to the limit of his capacity and his business is primarily to teach; yet he is interested in the pupils before him, discovers their powers and limitations, and, perhaps, learns better than anyone else the mental bent of each pupil. The principal or superintendent who has watched his boys pass from grade to grade is in a position to give most wholesome vocational advice. Three things are true:

1. Too many are passing out of our schools and away from our homes without any definite purpose in view and unprepared to do anything well.

2. With something definite in view, studies have a new interest, and life has a new purpose.

3. Service, the highest ideal of life, is emphasized and life becomes a mission, not merely a career.

Three things should be done:

1. A careful study of the pupils. If it is the province of the schools to make good citizens, someone in the schools should know what each pupil is good for.

2. Information along the line of life's callings—agricultural, industrial, commercial, and professional—should be at hand.

3. Frequent conferences by teachers, principals, and parents.

What is the use?

Commissioner Snedden, of Massachusetts, says:

Vocational training is one of the most important issues before the educational world, combined, as it always should be, with the necessary guidance to enable the pupil to

choose wisely the life-work in which he is most likely to succeed. Altho a satisfactory program for vocational work has not yet been wrought out, the recognition of the need of vocational training has now become quite general and much that is beyond the merely experimental stage has already been evolved.

In commenting on the above Dr. Jones, of Ohio, says:

Massachusetts in particular has accomplished a great deal during the year and Commissioner Snedden's reports on the subjects are encouraging. Evidently we are rapidly approaching the time when the vocational idea shall be not merely tacked on to our educational system or even ingrafted, but instead thoroly amalgamated with it.

Dr. Draper, of New York, in an address early in the year embodied this idea in what he had to say about educational ideals. After making a plea for "common honesty," he said:

Education that has life and enters into life; education that makes a living and makes life worth living; education that can use English to express itself; education that does not assume that a doctor must be an educated man and that a mechanic or farmer cannot be; education that appeals to the masses; that makes better citizens and a greater state—that is the education that concerns New York.

We believe that this is the education for America. To know is of inestimable value but to be able to do is a greater accomplishment. Knowledge and action should go hand in hand. As between the cultural and the industrial, a young man should be advised to choose both. During the past year many of us have been getting our good second breath in this matter. Culture and motor activity should and do complement each other.

TEACHERS' SALARIES

Considerable attention has been given in most cities and in some states to the question of teachers' salaries. In fact, a committee, appointed at the San Francisco meeting of the National Education Association is at the present time preparing a report on this subject. Speaking for our own city, for the past five years there has been an increase somewhere along the line each year. While this has not been large, not at all in keeping with the increased cost of living, it has been encouraging to our teachers.

We have been fortunate in having Dr. W. O. Thompson, president of the Ohio State University, as a member of the city board of education for the past six years. During practically all of that time he has been chairman of the Committee on Finance and has insisted upon better pay for the teachers and greater efficiency in the work. The tuition fund has been increased 37 per cent in five years.

OPEN-AIR SCHOOLS

About three years ago, the open-air school entered the educational field. It has gathered considerable impetus and during the year just closing has had its greatest momentum. Not only have these schools been a blessing to the anæmic and to those predisposed to tuberculosis but they have had an educational influence in the community. As a result, greater

attention is being given to the ventilation and lighting of the home and the school. Many states have passed laws fixing the standard of lighting schoolrooms as to amount, direction, and quality. Never before has ventilation, heating, and sanitation received the attention that now obtains. As a natural result, sensible decoration, cleanliness, and beautification follow. This is as it should be, for the æsthetic, the ethical, and the intellectual are a trinity that should never be divided.

UNIFORM REPORTS

The work of the Committee on Uniform Reports approved and adopted by the Department of Superintendence at its St. Louis meeting was a valuable contribution to the educational progress of the year. These are days of investigation—days when we seek and want to know the truth. It is far more important that we should find this out for ourselves in our own schools than that it should be left for commissions or committees to find it out for us, however much we might appreciate their approval or confirmation.

The primary object of this committee was to have reports prepared in a sufficiently uniform manner to make comparisons between different school systems fair and useful; but the effect upon the different systems of schools in making it possible to study their own internal workings from different points of view will prove more valuable than the outside comparisons.

As the schools have passed thru different stages of growth and development three steps should be noted:

1. At first, the one great question was that of growth, and statistics were of greatest value chiefly from that point of view. In those days the American common-school system was an experiment that had to be tried out and numbers were supposed to indicate the degree of approval. As Columbus was the second city in America to employ a superintendent of schools, the speaker has had opportunity to note the importance attached to figures merely.

2. From the days of Horace Mann, whose devotion to secondary education meant so much a half-century ago, until quite recently, the high schools of our cities have been measured largely in the same way. Of course numbers mean something, but size is not the vital question of the present day.

3. With the compulsory school law, so universal now, came a careful study of the quality of attendance. The chief question was: Were the children getting the benefit of the opportunities which the schools have to offer? Did they attend school?

While not overlooking the value of such general information as indicated above, the uniform reports bring to the front a more vital question than that of growth. What are the schools doing for those who attend? If there is a large percentage of nonpromotions, how is it accounted for?

No teacher can study the causes for nonpromotion in her class, taking into account irregular attendance, physical or sense defects, personal illness, mental incapacity, and indifference, without becoming more sympathetic for those who need sympathy and more interested in their welfare. Besides, the facts thus noted must come to the attention of those in authority and lead to such changes in conditions as may be necessary. No true teacher can take the pupil's cumulative card where presented, without having a special interest awakened in the child who presents it. No principal or superintendent can take the facts of failures by subjects as they come to him, without being in a measure startled by the excess in certain directions. A more careful study of the causes for failure in certain subjects is immediately started and plans for their correction are prepared. As the expert in any branch of study considers the large number of failures in his special line as reported by practically all of the school systems of the country, he will also apply himself to the solution of the problem by the preparation of a textbook better suited to the conditions and needs of the schools as thus shown.

The study of internal conditions and their improvement is the greatest school question of the present day.

We have tried to touch upon a few of the problems which have been uppermost in our minds during the year. We could not consider all, there is still much to be said: social centers, vacation schools, bibliography. As our vision enlarges, our ideals advance, and what seemed impossible at the beginning becomes surprisingly easy with knowledge and experience. The work of the year has had its special problems and difficulties for each. But forgetting the unpleasant parts of these problems and difficulties, we should press forward to a new and more advanced position, and attack the new problems with courage, hope, and enthusiasm, thinking as we see them looming up before us, as Byron said of the great St. Peter's:

> Enter; its grandeur overwhelms thee not;
> And why? It is not lessened; but thy mind,
> Expanded by the genius of the spot,
> Has grown colossal.

So, before careful preparation and thought, all difficulties must vanish.

DISCUSSION

GRACE C. STRACHAN, district superintendent of city schools, Brooklyn, N.Y.— Following is a brief outline of the plan of organization followed in New York for taking care of the exceptional child.

Special classes are established for the blind, the deaf, the crippled, the anæmic, and the mentally defective. These classes are not housed in special schools; neither does every school have any or all of these classes. For instance, in the twenty schools which I supervise, the total register of which is over 33,000, I have eight classes for mentally defective children in six schools, one class for the blind, two classes for the deaf, four classes for the crippled, and four "open-air" classes.

The crippled children are gathered from various parts of the districts, and carried in stages to the school.

The teacher of each of these classes is paid an additional salary of $100. The register in the deaf and the blind classes is ten, in the mentally deficient and the crippled, fifteen, and in the open air about thirty.

For children not afflicted in any of the ways described above, but who are not fitted for the work of the regular classes done by children of the same age, classes which we name "C," "D," "E," "Rapid Progress," and "Slow" are established.

The "C" class is composed of foreigners. The work of such classes is the teaching of English to foreigners. As soon as any child in the class has a sufficient command of English to take up the work of any regular grade for which he may be fitted, he is transferred to such class. It is evident, therefore, that the register of such classes is variable, but we try to keep the maximum at twenty-five or thirty.

The "D" class is composed of children who will be fourteen years of age during the school year, who will want to get their working papers as soon as they have reached the age of fourteen and whose educational qualifications are such that it is evident they would not be fitted to pass the test required for working papers, if held in the regular grades. The register of these classes is also limited to about twenty-five, and the course of study is modified by cutting the time devoted to some of the so-called "fads and fancies," in order to increase the time for arithmetic, English, and geography.

The "E" classes are for the over-age children. Naturally they greatly exceed the other special classes in number. The register is kept below thirty-five if possible. As soon as pupils of the "E" classes are ready for the work of the regular grade in which the age of the pupils corresponds to their own, they are transferred to such regular grade. The course of study is modified also for these "E" classes. This modification is not formal, but is left more or less to the discretion of each principal. In large schools, there is likely to be an "E" class for pupils of each year or half-year—and the pupils who are decidedly over-age are often promoted from one "E" class to another "E" class for several terms.

The beneficial effects of the organization of these special classes are:

1. The relief of the regular classes, resulting from taking out the mentally defective and otherwise afflicted children, and also those who are either abnormally bright or abnormally slow. The teacher of the regular class is therefore able to handle satisfactorily a larger number of pupils, and to accomplish much better results than under the old style of organization.

2. Much more attention is given to the individual needs of each child, as in the special classes the register is much smaller, the children of similar deficiencies are grouped together, and their progress is much more rapid.

3. The saving in money by the reducing of the number of "repeaters."

A. E. Winship, editor of *New England Journal of Education*, Boston, Mass.—Notwithstanding the extended, detailed, and graphic portraiture of the progress of the year as presented by the chairman, it is probable that everyone of us has been thinking of what has not been said.

To my thinking, the great feature of the progress of the year has been the long strides taken away from the tyranny of tradition and from the artificiality which have held a superstitious sway over the schools all too long.

For a third of a century we have been working more or less seriously to put the whole child to school, and the year 1911–12 will be long remembered as the time when we first seriously said, "Educate the child everywhere and all the time." It has been assumed until now that the school furnished all the education that was received in more than six thousand working hours. Now that we have come out from under the sway of that spuerstition we wonder that we ever assumed anything of the kind. Mr. Alderman,

state superintendent of Oregon, is the leader in a group of earnest men who are helping in the child's education everywhere and all the time.

A few specific activities in the line of progress are also worthy of notice. More has been done toward the purifying of the outhouses in country districts than ever before.

Teaching morals has had a new significance; the beginning made in studying how to teach sex-hygiene is significant.

There has been a great movement toward providing suitable home life for teachers in rural districts. For instance, Walla Walla County, Wash., has no teacher who has not a comfortable and reasonably attractive boarding-place. The county superintendent insists upon eating with every teacher where she boards. Already six school districts have built a teachers' house on or near the school lot. This movement for the decent housing of the teacher is coming to have national significance.

Neighborhood centers in connection with rural schools are assuming important proportions. In one school district, near Ellensburg, Wash., with thirty-two pupils enrolled, has been built, by public taxation, a neighborhood house costing $4,000. It has every social, physical, and public convenience of a city Young Men's Christian Association building, and brings together all the people frequently for social and public functions.

While we have been investigating and talking there are great movements sweeping us forward in the social betterment of rural communities. In all this, the year 1911–12 has been memorable.

Edwin G. Cooley, Chicago, Ill.—Superintendent Shawan has spoken of the progress made in the study of retarded children and of school attendance. There is another phase of this question which I believe is worthy of notice. There appears to be an increasing appreciation of the fact that our customary period of compulsory school attendance terminating at fourteen is too short; that this terminus was not selected as the result of any careful study of the question, but is the result of tradition. In many civilized countries at present there is a movement on to lengthen this period from two to four years, either by adding one or more years to the period of attendance at the ordinary school, or by requiring part-time attendance at supplementary continuation schools. Both movements are to be seen in Europe and America. Several of the American states have enacted laws during the last few years requiring students between fourteen and sixteen who are not at work to attend school.

There seems to be a general feeling today that to permit the boy or girl at fourteen to leave school and enter the business or industrial world without further instruction and guidance is a mistake. At fourteen, parental control is relaxing, new passions and interests in the boy and girl are awakening, and they need guidance and instruction more than ever before. To turn them loose at this time in the commercial or industrial world without this educational guidance and instruction often leads to life as a vagabond, a parasite, or a criminal.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—STELLA L. WOOD, superintendent, kindergarten normal school, Minneapolis, Minn.
Vice-President—CORA L. ENGLISH, supervisor, public school kindergarten.....Kansas City, Mo.
Secretary—A. JESSIE DAVIS, kindergarten director.....Superior, Wis.

FIRST SESSION—TUESDAY AFTERNOON, JULY 9, 1912

The department met in joint session with the Department of Elementary Education.

The meeting was scheduled to take place in the Gold Room of the Congress Hotel, but this proving inadequate in seating capacity, the meeting was transferred to the Auditorium Theater and called to order at 2:30 P.M.

Announcements were read by H. B. Wilson, president of the Department of Elementary Education, and then the meeting was turned over to the president, Stella L. Wood.

In the absence of the secretary, Marie E. Gorham, secretary of the Chicago Public School Kindergarten Association, was appointed secretary *pro tempore*.

After a few words on the importance of education in childhood, Miss Wood spoke of the new educational method, the Montessori method, stating that Dr. Montessori has interested more people than any other contemporaneous educator.

Miss Wood then introduced the first speaker, Florence E. Ward, of the Kindergarten Department, Iowa State Teachers College, Cedar Falls, Iowa, presenting Miss Ward as one whose knowledge would be particularly valuable because, added to the fact of being a worker herself, Miss Ward had the opportunity of spending several weeks making personal observations of the workings of this method by Dr. Montessori in her "Houses of Childhood" in Rome, Italy. Miss Ward's topic was "The Montessori Method."

Carl Byoir, president of the House of Childhood, New York, N.Y., followed with a talk on "The Presentation of Montessori Material." Mr. Byoir had on display considerable Montessori material and explained its object and method of use, also announcing that the material could be seen at any time at Thomas Charles's Kindergarten Supply House, Chicago, Ill.

Elmer E. Jones, professor of history of education, University of Indiana, Bloomington, Ind., was expected to present a paper on "Suggestions from Cases of Unusually Rapid or Irregular Progress in Public Schools," but was unable to be present and the paper was omitted.

At this point, Miss Wood announced the appointment of Barbara Greenwood, Los Angeles, Cal., Alice Temple, Chicago, Ill., and Alma Binzell, Winona, Minn., to serve on the nominating committee, and Lucy Terrill Ellis, Phoenix, Ariz., and Mabel Osgood, Fort Worth, Tex., were appointed to serve on the resolutions committee.

Discussion of preceding papers followed; W. N. Hailmann, of the Normal Training School, Cleveland, Ohio, and Alice H. Putnam, of Chicago, Ill., were called upon for expressions. Further remarks were made by Miss Ward and Mr. Byoir.

After the reading of announcements, the meeting adjourned.

SECOND SESSION—Thursday Forenoon, July 11, 1912

The meeting was called to order in the Gold Room of the Congress Hotel at 9:30 A.M. by the president.

The first speaker, Philander P. Claxton, United States commissioner of education, Washington, D.C., presented a paper on "The Place of the Kindergarten in the Child's Education."

George F. James, dean of the School of Education, University of Minnesota, Minneapolis, Minn., followed with an address on "The Basic Philosophy of Froebel."

Mary D. Bradford, superintendent of schools, Kenosha, Wis., read a paper on "The Kindergarten and Its Relation to Retardation."

A general discussion followed in which Elizabeth Harrison, principal of Chicago Kindergarten College, Chicago, Ill.; Mary B. Page, director of Chicago Kindergarten Institute, Chicago, Ill.; W. N. Hailmann, Normal Training School, Cleveland, Ohio; and Alice H. Putnam, Chicago, Ill., took part.

The Committee on Nominations submitted the following report:

For *President*—Mary B. Page, director, Chicago Kindergarten Institute, Chicago, Ill.
For *Vice-President*—Grace Fulmer, supervisor of kindergartens, Los Angeles, Cal.
For *Secretary*—Edith Adams, State Normal College, Ypsilanti, Mich.

This report was unanimously accepted.

The meeting then adjourned.

THIRD SESSION—Friday Afternoon, July 12, 1912

The meeting was held in Scammon Gardens, adjacent to the School of Education, University of Chicago, Chicago, Ill., and was called to order at 2:30 P.M. by the president.

After some preliminary remarks, John T. McManis, professor of education, Chicago Normal School, Chicago, Ill., gave an address on "Sense Training for Young Children."

The next speaker, Elliot R. Downing, assistant professor, School of Education, University of Chicago, Chicago, Ill., spoke on "Live Stock in Public Schools." Mr. Downing exhibited live goldfish, rabbits, silkworms, etc., and gave suggestions as to their food and care.

The Committee on Resolutions presented the following report:

Whereas, The Kindergarten Department of the National Education Association, assembled at Chicago, Ill., has received unfailing kindness, great inspiration, a feast of knowledge, and a larger vision;

Resolved, That special thanks are due our president, Miss Wood, for her untiring energy, in the preparation of this profitable program.

Resolved, That we extend grateful appreciation to those who have taken part in the Montessori discussion, which brought many to Chicago from long distances, and to the Department of School Patrons, for their courtesy in extending use of Auditorium when our own meeting-place was inadequate.

Resolved, That we express our appreciation to our commissioner of education, Philander P. Claxton, for his splendid address and his tribute to Frederick Froebel.

Be it further resolved, That the Kindergarten Department tenders its general and heartfelt thanks to each and every individual who has in thought, word, or deed made our stay among you so pleasant.

The report of the Committee on Resolutions was unanimously accepted.

The meeting then adjourned.

SOCIAL SESSION—Friday Afternoon, July 12, 1912

The Chicago Public School Kindergarten Association and the Chicago Kindergarten Club entertained the visiting kindergartners most charmingly at the close of the regular session of the Association, Friday afternoon, July 12.

The entertainment took the form of a garden party, and was held in Scammon Gardens, adjacent to the School of Education, University of Chicago, Chicago, Ill. The grounds were admirably suited for such an occasion and the day was favorable. A delightful program of folk dancing, music, and games was carried out, followed by refreshments. A pretty feature was the presentation to each guest of a bunch of field daisies and a dainty fan with wrist attachment.

Several hundred were in attendance, which was a most gratifying recognition of the hospitality offered.

Among the honored guests was the Baroness von Suttner, Vienna, Austria, member of the American School Peace League, and author of *Ground Arms*, which won her the Nobel prize.

Very special appreciation is due Miss Hofer, who directed the folk dancing and garden games, and to the committees who planned and executed the details of the afternoon's pleasure.

MARIE E. GORHAM, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE MONTESSORI METHOD

FLORENCE ELIZABETH WARD, KINDERGARTEN DEPARTMENT, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA

During the past year the Montessori method has been so much exploited by the press that its peculiarities have become familiar to those who read and one who attempts to describe it further is in danger of repetition. It is my wish at this time simply to give you some impressions of the system that remain after a study of the work at first hand and a fortunate opportunity to gain something of the spirit of the method from the lips of its founder.

America, marked by its pioneer spirit, has never been afraid to blaze new paths in any field of activity, and has been most open-minded in its reception of light from whatever source. Because of this hospitality toward new ideas, one is not surprised to find that among the students from all parts of the world investigating the Montessori method in Rome, Americans outnumber those of any other country, and it is easy to believe that no prejudice or tradition will be allowed to prevent our fair and just consideration of this new system.

One's presence in Rome does not, however, insure illumination on the subject of the Montessori method. Dr. Montessori is difficult of access and her schools are not open to the public. So those who win entrance to the laboratory and the confidence of this quiet, unassuming originator count themselves fortunate.

To say that she answers all questions or that her system solves all pedagogical problems, as some enthusiasts do, is manifestly absurd. The Dottoressa herself makes no such sweeping claim. She does without doubt

point the way to a distinct advance along some lines of early education. Like many others, I went to Rome with some question as to whether the development of certain educational theories might not have been unduly exploited by seekers of magazine sensation. I came away, after weeks of daily coming and going in the schools, and personal acquaintance with Dr. Montessori and her associates, with the conviction that no more earnest, sane contribution has been made to education since the time of Froebel and Pestalozzi than this made by Dr. Maria Montessori in her Case dei Bambini or Houses of Childhood in Rome, her peculiar service to pedagogic science being her application of generally accepted principles with a technique and original development and use of didactic material which give to these remarkable power and scope.

I need say little of these principles, for they are the familiar and accepted ones upon which all modern education is established. Dr. Montessori holds to the theory that self-activity is the only means of growth; that "all human victories, all human progress, stand upon the inner force"; that personality can develop only in an atmosphere of freedom; that environment, while it cannot create character, should provide wholesome stimulus for its development—not only the outward freedom of air, sunshine, and space, but the more vital freedom from invasion by other personalities. Believing that the child can develop social virtues only by personal contact with social problems, the school in her hands becomes a microcosm of the normal social community, wherein the child confronts and solves for himself real problems. Since the highest ideal of social organization is self-direction in the use of liberty under law, Montessori insists that the only legitimate discipline is that which leads the child to control himself. Instead of annihilating the will, her method leads to the finest type of independence.

In sharp contrast with the usage which makes the teacher the dominating figure in a schoolroom, is the self-effacement of the Montessori directress. Like Froebel's ideal kindergartner, she must be "passive, not active; following, not leading." Dr. Montessori's own illustration of the function of the teacher makes this point clear. She reminds us that the useful guide who shows to a visitor a thing of artistic beauty simply says enough to enable the sightseer to understand and appreciate the object contemplated, then withdraws himself, for the guide is not the object of greatest interest. So the teacher must give desirable information, direction, and inspiration, then leave the child with the new truth. The garrulous teacher is an abomination to Dr. Montessori. She holds to the form of lesson presentation used by Seguin, minimizing words and calling forth much mental activity on the part of the child. "A child smothered with words comprehends little that is said to him."

I once visited a board school in London where there was that painful quiet of suppressed, inactive children. Only one boy out of sixty moved

in his place, and when this one swung his feet gracefully into the aisle to make the spine-curving seat less uncomfortable he was sharply reproved, and the teacher said by way of apology, "I have had this boy only two days." I knew without her telling me that this free little being had not been long in such an atmosphere, but that he would soon succumb to the wet-blanket treatment and be as unnatural and "good" as the others.

Dr. Montessori says:

> We do not consider an individual disciplined only when he has been rendered as artificially silent as a mute and as immovable as a paralytic. He is an individual annihilated, not disciplined. We call an individual disciplined when he is master of himself.

Fundamental to all Dr. Montessori's work is her emphasis upon the value of sense-training, especially the basic sense of touch, which she makes use of as a main avenue for intellectual awakening. The results which she gets from her methods of teaching reading, writing, and number are truly remarkable, both in the small amount of conscious effort put forth by the child, and the brief length of time required.

Montessori's thought is not to push the child forward into experiences beyond his period of development but rather by expediting mechanical routine to prevent his forming a distaste for study and thus to bring him open-minded and alert to the earlier enjoyment of exercises in literature, art, and science.

One might think that only a skillful teacher, perhaps a Montessori herself, with a selected group of children, could accomplish such results; but here the visitor meets with surprise. There are a number of these schools, in widely differing quarters of Rome. In them are found children from all classes of society. There is the Pincian Hill School with its tenderly reared scions of the exclusive aristocracy; the one in Via Giusti conducted by the Franciscan nuns and composed of children from the self-respecting middle classes; and the school of San Angelo in Pescharia with its children of the lowest social strata.

That the Montessori system is fundamentally right is demonstrated by the fact that it seems to work successfully with all these various types of children, despite the differences in heredity, home environment, and early training.

As for the qualifications of the teacher, or "directress," as Dr. Montessori prefers to call her, there is wide range, from the scholarly, scientific Dr. Montessori herself to the cloistered Franciscan nun. The earnest teacher imbued with reverence for the child's personality and the ideal of its development in an atmosphere of freedom is bound to win a measure of success. Often she becomes powerful, beyond her own expectation, as Dr. Montessori has so admirably argued.

In Via Giusti is the school which Dr. Montessori conducts under her own personal supervision and it is here that one sees the real laboratory in which the Dottoressa is watching the practical working-out of her plans,

under physical conditions that are quite ideal. Instead of a single schoolroom with stationary seats and desks, as found in the average primary school, these children enjoy large open courts and generous spaces for gardens and games. All furnishings are made with a view to children's comfort and convenience, even the chairs and tables being light and movable. The didactic materials and apparatus inviting investigation are everywhere in evidence.

Instead of arranging the children in even rows and classes and requiring that at stated times they shall engage in prescribed occupations, they work singly, or form themselves into natural groups according to mutual taste and present interest. Often a dozen different activities are going on at once, the children going freely to the convenient cupboards for the auto-educational, self-corrective materials in the use of which these schools are so unique. There is no confusion, no disorder, neither is there the unnatural quiet which is the fetish of the overorderly teacher. One might fancy the school anti-social until it comes time for the games, the serving of the luncheon, or other exercises which require community effort.

Montessori has comparatively few dramatic games and little interest in make-believe. She holds that the child hungers for reality and for purposeful activity, and puts into his hands the tools for gardening and for many of the household processes. She believes that the truth and wonder of the world furnish all the food the imagination needs, so the fairy story is not much in evidence.

This blending of work and play, of doing for the sake of the product, of appealing to the child's understanding as well as his imagination, develops habits of thrift, industry, and service, and gives self-mastery and bodily poise. It is delightful to watch the absorbed interest with which these little workers sweep and fold their small rugs and the housewifely precision with which they put away their little brooms. Their earnestness is illustrated by the oft-repeated story of the Queen's visit to one of these schools. A child who was arranging some materials was asked by the Queen to read; she smiled acquiescence, but continued her work. An older person, embarrassed by the child's apparent indifference, said, "Rosa, don't you know that this is the Queen?" "Yes," said the child, "but doesn't the Queen know that I must put away my work before I begin to read?"

I have only attempted in this limited time to speak of a few of the distinctive features of these Italian schools, and have not discussed the feasibility of their adoption here in America nor have I made comparison between the Montessori school and the kindergarten. I will state, however, that I believe there is little inherent antagonism between the general ideals of Montessori and those of the broad-minded disciple of Froebel.

The kindergarten and the Montessori school are built in the main upon the same basic principles. In the working-out and exemplifying of these principles we find marked differences. These should call forth friendly investigation and discussion.

One who associates eccentricity with genius will be happily disappointed in meeting Dr. Montessori. She is a graceful, queenly woman of much personal charm. Always becomingly gowned and free from affectation, she illustrates the fact that there is no necessary antagonism between brilliancy of mind and attractiveness of person. She proves on acquaintance to be an untiring seeker after truth. Personal recognition and especially sensational notoriety are farthest from her desire. Her hope is that American educators will give her study and results serious consideration, judging them finally on their own merits, and that her materials shall not be separated from the use for which she has so painstakingly perfected them, but rather kept together as parts of a system.

One who seeks to be fair and candid, I feel sure, must conclude that while

> All the good the past has had
> Remains to make our own time glad,

there is not yet any such thing as finality in methods of teaching small children. It is not likely that we shall see any clear line of cleavage between the old and the new, but we shall no doubt see in time the introduction of every demonstrated principle which will help children to escape unnecessary drudgery, and to find the acquisition of truth and power a process of delight.

THE PRESENTATION OF MONTESSORI MATERIAL

CARL BYOIR, PRESIDENT OF THE HOUSE OF CHILDHOOD, NEW YORK, N.Y.

An inquiry now into the methods of Dr. Maria Montessori can only serve to furnish the basis of a comparison between kindergarten and primary education in the United States and the methods pursued in the "Houses of Childhood" in Rome, with a view to the possibilities of adapting for our use whatever may be of value under our conditions. The most casual observer will recognize at once the fact that American teachers are working in a school environment entirely different from that of the Montessori schools in Rome. On this account, it is possible now only to form a judgment which actual teaching observation in our schools must confirm or deny. Dr. Montessori's own book is a complete exposition of her method. It would be too presumptuous here to attempt more than to indicate to the American student how the Montessori method may be approached for an understanding of its relation to our teaching methods.

Those who seek to compare Dr. Montessori's principles with the methods of the kindergarten or the primary grades will find singularly few points of comparison. This does not mean that the method of the Dottoressa is educationally "a bolt from the blue." It means simply that the principles underlying her method have been developed in an isolated

field; a field in which a few exact scientists have devoted their lives to the betterment of the conditions of the unfortunate. We shall find many points of contact when we compare this method with the methods that have long been in use in the teaching of the blind, the deaf and dumb, and the mentally defective.

Maria Montessori, as a teacher of the idiot children of Italy, found in the methods of physiological sense-training a formula applicable to the education of normal children. She has applied this formula with the method of the experimental psychologist. In Dr. Montessori's career we may observe a life of preparation for the bringing-together of educational methods which have been long applied in distinctly separate fields. With a splendid knowledge of the history of methods, Dr. Montessori has combined the fruits of special training; as a physician, she learned the physical needs of the child; as a teacher of deficient children, she mastered the methods of sense-training; to an exact knowledge of psychology and anthropology she has added an inventive mechanical genius probably unrivaled in the history of education. This great Italian teacher has built a new laboratory of experimental psychology and equipped it with new instruments of psychometry fitted to the needs of her child subjects.

We shall find the historical basis of the Montessori method in the work of Itard and Seguin with idiots; in the work of Periere with deaf mutes; of Haüy for the blind, and in the treatises of the Christian School (St. Simonism). Similarly, we shall see that the principles underlying the Montessori method have more in common with the theories of Spencer, Rousseau, Descartes, and Pestalozzi than with the philosophy of Froebel. Such a statement is not intended to mean that there are inherent conflicts between the methods of the kindergarten and those of the Case dei Bambini. Rather they are supplemental methods in whose combination the American teacher may find a mean of improved pedagogy.

In *The Montessori Method*, Dr. Montessori has most generously acknowledged her indebtedness to Seguin. Long before Seguin returned in 1880 from the Vienna Universal Exhibition as United States commissioner on education, he had dreamed of "the union of the joyous exercises of the kindergarten, with the application of physiology to education." This dream has found in the work of Dr. Montessori a fuller realization than Seguin could have imagined and a richer fulfillment in a method that is psycho-physiological. Over half a century has passed since Seguin wrote in *Idiocy and Its Treatment:*

> The physiological education of the senses is the royal road to the education of the intellect; experience, not memory, the mother of ideas.

Dr. Montessori has answered the appeal of Seguin and from the physiological methods of the education of idiots has "obtained a formula applicable to universal education."

One other principle of Seguin underlies the method of Montessori: education thru the development of the affective functions. It may be true that the study of Seguin inspired in some measure Montessori's beautiful love for the child. Certainly it is true that these great French and Italian teachers combine with a common method of physiological sense-training the principle that

> to make the child feel that he is loved, and to make him eager to love in his turn, is the end of our teaching as it has been its beginning. If we have loved our pupils, they felt it and communicated the same feeling to each other; if they have been loved, they are loving.

Much emphasis has been laid upon the methods of Seguin because it is only thru an understanding of Seguin that we shall fully understand Montessori. It might be well in the serious study of the Montessori method to bear in mind Seguin's conclusions from the experiments of Periere:

> 1. That the senses, and each one in particular, can be submitted to physiological training by which their primordial capability may be indefinitely intellectualized.
>
> 2. That one sense may be substituted for another as a means of comprehension and of intellectual culture.
>
> 3. That our most abstract ideas are comparisons and generalizations by the mind of what we have perceived thru our senses.
>
> 4. That sensations are intellectual functions performed thru external apparatus as much as reasoning and imagination thru more internal organs.

The methods of Seguin adapted and improved may be seen in practical application at such splendid American schools as the Massachusetts School for Feeble Minded, at Waverly, Mass., and the Seguin School, at Orange, N.J. In the school at Waverly there is a richness of sense-training material and a success in its application probably surpassing even that of Dr. Montessori in the Italian schools for idiots. In adapting the materials of Seguin employed in these and similar institutions, Montessori has carefully eliminated those too obvious steps which are necessary for the education of the deficient, but which will not serve for the normal child. Montessori has added to the groundwork of Seguin the fruits of a mechanical genius probably unparalleled in the history of education. Her apparatus shows in every piece an infinite patience in the observation of the processes of the mind of the normal child and an ability to translate her thoughts into concrete materials.

The didactic apparatus used by Dr. Montessori is not a set of mere separable toys. Neither are these materials used simply for the purpose of sense-training. In the fullest sense they are the instruments of the psychological laboratory. The method of Dr. Montessori is the method of the experimental psychologist. But the apparatus of the psychologist was not available for the purposes of Montessori because her subjects were very young children. The apparatus of the psychological laboratory

for mental tests depends in its application largely upon the observations of the subject. Professor James expresses this concisely in the statement, "Introspective observation is what we have to rely on first and foremost always." But methods dependent upon introspective observation are almost useless in testing children under five years of age; for instance, the test-type or the astigmatic chart in the tests for visual acuity. The child cannot read, nor can he express the visual impression obtained from the chart. So in testing auditory acuity, even so practicable an instrument as Seashore's audiometer, largely used in tests with school children, would doubtless becomes less valuable in tests with very young children. Tests dependent upon introspective observation are usually also dependent upon the nomenclature of the subject for expressing his impressions. Needless to say, the three-year-old child is not capable of the adequate expression of its own impressions.

In an investigation of the Montessori didactic apparatus, viewing it in the light of the methods of the laboratory, it is important to bear in mind a distinction emphasized by Dr. Montessori. The psychologist measures the senses; Montessori educates the senses. When the psychologist has secured his data, his work with the individual subject is done; when the teacher of the Montessori method has measured the sense acuity of the pupil, a basis for the education of the senses of the individual has been secured.

Even as the psychologist finds no detail too trivial to be neglected in the "setting" of a test, so Dr. Montessori lays emphasis upon the methods of administration. This gives rise to the necessity for the fundamental principle of the complete liberty of the child in its spontaneous observations. If the teacher first shows the child how to build the "broad stair," she has learned nothing of the child's perception of the relation of blocks of graded sizes. But if the child, playing unaided, builds an irregular stairway, the teacher easily observes that the child cannot regularly relate these blocks. So the teacher no longer leads the child, but follows as an observer. The teacher stands in the place of the experimental psychologist. Once the child's faulty observation is ascertained, the teacher becomes a leader to show the right way. Seguin saw that this was the place of the teacher in the application of sense-training method when he wrote:

> Before entering into the generalities of the training, the individuality of the child is to be secured; for respect of individuality is the first test of the fitness of a teacher. At first sight, all children look much alike; at the second their countless differences appear like insurmountable obstacles; but better viewed these differences resolve themselves into groups easily understood.

This corroborates the actual teaching experience of teachers of the Montessori method: that the first few weeks of individual observation are weeks almost of chaos. But out of these apparently unmanageable

differences there arises an almost perfect discipline. The method trains the individual, but the early days are trying ones for the teacher. Some activities must be suppressed; peculiarities must be watched; individuals must be assisted toward finding their place in the new school community. As a result of these days of observation, the teacher acquires a knowledge of the individual needs of her children that makes possible the discipline born of the happy employment of the pupils.

A study of the Montessori apparatus as sense-measuring and sense-training material is best made in the sequence in which it is presented to the children. The dressing-frames are not properly a part of the sequence in sense-training. They have their place properly in what Dr. Montessori terms "gymnastica." They develop in the children a practical facility in the use of their fingers and make an interesting game of the simple operations of dressing. They constitute a part of the system which has as its aim the preparation of the child for independence in his environment. Probably, too, these simple little frames have a direct importance in the preparation for writing. Their mastery by the child requires a number of complex motor correlations which entirely escape the casual observer. The defective child is almost entirely incapable of these correlations. Normal children have a lack of facility in the use of their own fingers in buttoning, tying, and lacing, which the adult mind can scarcely comprehend. Since these materials have been exhibited in America, many fond parents, upon examining these frames, have made such remarks as, "My little girl wouldn't be interested in that; they are too easy." This same parent is unutterably surprised when she discovers that her little girl cannot do many of these simple things with any degree of facility. In this connection, it is to be observed that the children of the Case dei Bambini are the authors of their own materials. Dr. Montessori has developed her apparatus after years of painstaking observation of her little pupils, and often the minutest details of mechanical construction, often overlooked by the adult observer, are of great importance to the child mind.

The sensory training properly begins with the six sets of wooden blocks. All of these sets of blocks are truly "auto-educational," the materials are self-corrective. There is only one correct combination in each set. Either the given lesson is correctly done and the child knows that it is right, or it is incorrectly done and the child knows that it is wrong. The teacher as a passive observer acquires an exact knowledge of the limits of the child's perception. All of these block games have an objective test. For instance, in the "long stair," the child has a double opportunity to perceive errors thru the graduating lengths of the sticks and the regular alternate coloring of the decimeter units. The three sets of cylinders, being the first step in visual perception of differences in size, are most positive in the correction of errors. If the child misplaces any one of these cylinders, he finds himself at the end with a cylinder for which

there is no socket in the base. Later, he makes the correction immediately upon perceiving that a given cylinder does not exactly fit where he has placed it. Later when the child begins numeration, he begins with these same blocks and approaches a new problem with the confidence born of familiar materials. All of the block games are composed of ten pieces and form the basis for the decimal system as well as for counting. The "long stair" is particularly rich in its possible combinations for counting, addition, subtraction, division, and multiplication. Much of the Montessori work is like this: the children become thoroly familiar with many fundamental forms long before they know what they are, or what advanced uses are to be made of them.

The color spools show more definitely the laboratory method. In duplicate boxes, there are sixty-four color spools. These colors are not pure primary colors and tints and shades. They are color mixtures. The effort is not to teach the child the colors or their names, but to train the sense of color discrimination. The child must make very fine discriminations in laying out and matching these colors. If the little pupil in arranging a color carpet mixes a lighter spool among the darker ones, the teacher-observer sees at once the child's faulty perception. It is not necessary for the tests that the child have any knowledge of color or know the names of colors. Indeed, few adults could find names for all the Montessori spools.

So the laboratory analogy could be carried out with practically every piece of the Montessori material. The teacher must be not only a well-trained teacher, but a well-trained observer. An analysis of the method from this point of view indicates how much misapprehension has been brought about by Dr. Montessori's use of the term "auto-educational." A large and imaginative American public is prepared for a system that requires no teaching, and expectantly awaits the phenomenon of a convenient room, supplied with blocks and sandpaper letters, incubating child prodigies, who, at the age of four, will come forth with a knowledge of many languages and complete understanding of higher mathematics. If there is any method which requires well-trained teachers, it is the physiological method of sense-training.

DISCUSSION

W. N. Hailmann, Normal Training School, Cleveland, Ohio.—It is gratifying to note that, in the presentation of her work, Dr. Montessori bases her procedures broadly and eloquently upon recognized principles of the new education of which Froebel is the acknowledged prophet. Her *Method of Scientific Pedagogy* is replete with appeals in behalf of self-activity, independence, self-help, freedom, respect for the child's individuality and spontaneity.

In truly classic style, she satirizes certain shortcomings of the current school: its unhygienic seatings, its repressive discipline, its artificial incentives, its disregard of the child's needs, its false methods, and the rest.

For this, for her single-hearted devotion to her children and to her work, for the

fervor and impressiveness of her words, for her vigorous advocacy of the "scientific spirit" on the part of teachers, for her ingenuity in providing a stimulating environment and effective devices for her purposes, as well as for the enthusiasm she stirs in all who are touched by her work, she is entitled to the admiration and gratitude of all who are interested in the momentous work of education.

The charm and cogency in the establishment and defense of her principles should not, however, carry us off our feet. For it is not these principles, but certain details and specific achievements in their application to the conduct of her "Children's Houses" that constitute the claim to the prominence given to her work.

Conspicuous among these details are her devices for sense-training. Dr. Montessori justly attaches primary value to sense-training in the mental development of the child. Indeed, a number of her exercises can be used with advantage in the play-work of the kindergarten and of the primary school. But, in her hands, these plays yield no outcome beyond the training of the senses, furnish no stimulus to the child's imagination, no opportunity for the exercise of the constructive and creative instincts. The child recognizes and names certain sense impressions with remarkable accuracy, but fails to apply these to purposes of self-expression. To use Froebelian terms: the child deals in these exercises all but exclusively with forms of knowledge, but remains a stranger to forms of life and of symmetry or beauty.

Again, these exercises as conducted in the Children's Houses exert in character and circumstance an intensely isolating influence. Usually, each child plays alone, finds practically no intellectual sympathy, no opportunity to use his successes in social effort. Even in some of her otherwise excellent color and sound games and in certain marching exercises each child is practically alone, fails of social intro-ordination in a common purpose, fails to feel that his presence is needed for social success. Nor can I find any indication that the free and directed games relieve this dearth in social application of individual ability in sense-perception.

Probably these shortcomings, if they are such, are due to Dr. Montessori's antecedents. It appears that she gained her pedagogic enthusiasm in connection with the education of defectives in an insane asylum. Here, following the lead of Dr. Seguin, she achieved surprising results, and even brought some idiots to read and write and to prove their ability subsequently at an examination in the public schools together with normal children. This, when she came to take charge of the Children's Houses, led her to attempt the application of the methods for defectives to the education of normal children between the ages of three and six, and to formulate the plausible principle that the same didactic material which with defectives renders education possible will with normal children stimulate auto-education.

It is obvious that work under such a principle—involving neglect of language, of self-expression, of social tendencies, of productive and creative activity—threatens arrest of development in these directions. A notable instance of this is related by Dr. Montessori, altho with different intent.

Some visitors who had noticed that the children could read print, sent them some illustrated books, simple stories which she, however, felt they could not understand, altho the teachers had assured her that they could read better than the second elementary. Dr. Montessori, in order to assure herself, had the teachers tell the children the stories in order to see how many were spontaneously interested. The teachers were not to call the children to order. After a few words, the children began to withdraw their attention, and soon all were noisily engaged, each in his chosen occupation.

In a second experiment, she had some children read in the book without running explanations and questions. After a while, the child was asked if he understood what he had read. This he promptly denied. She explains this by stating that the child had heretofore been engaged only in the "mechanism of the language" and had no idea as yet of the "logical language" with which the book dealt.

The ingenuity with which she supplied this lack is noteworthy. Her account of her devices is full of valuable suggestions to primary teachers.

Indeed, among the achievements of her day-nurseries none has attracted so much attention as their success in leading the little ones to proficiency in the arts of writing and rudimentary arithmetical notation. This represents, in fact, the only noteworthy outcome of the elaborate training of the tactile and muscular senses.

Her method of teaching writing merits unreserved approval in so far as it rests on drawing and avoids the customary ado about holding pencil or pen. But the abrupt transition from the first exercises in drawing to the drawing and writing of letters is quite arbitrary. The children's interest in the work obviously does not rest upon any felt need on their part, but is stimulated and sustained by elaborately artificial means.

Those of us who may be tempted by Dr. Montessori's brilliant exploit "to go over to the enemy" should remember her experiments with the reading children, related a moment ago, which show clearly that while the children could draw and write and call letters and words, "they still were strangers to language, to its bearing on feeling and thought, and to its social value."

Moreover, Dr. Montessori's apparent success is attributable in a large measure to the character of the language with which she deals. With a simple and consistently phonetic language like the Italian, the strictly synthetic Montessori method, based on the unvarying correspondence of sign and sound, will secure a measure of success in the "mechanism of the language." But the varied and seemingly arbitrary relations of sign and sound in the English language, together with the great increase in phonic elements, call for much phonic analysis in preparation of subsequent synthesis in writing.

None of my strictures can in any way detract from the great merit of Dr. Montessori's remarkable work, as indicated in my introductory remarks. Indeed, they are meant merely to direct attention to certain of its features which seem to call for readjustment of her devices, where these seem to fall short of the principles she so eloquently and fervidly sets forth.

In his classical *Report on Education* as United States commissioner on education at the Vienna Exposition, republished in extended form in 1880, Dr. Seguin advocates for little children the "physiological infant-school" as resulting "from the union of the kind treatment of the Salle d'Asyle and the joyous exercises of the kindergarten, with the application of physiology to education." It is a pity that Dr. Montessori, so eminently qualified to accomplish this, slighted the first two of these factors and borrowed so much from the school for idiots and the questionable traditional tendencies of the current primary schools of Italy.

Alice H. Putnam, Chicago, Ill.—There are two essentials to be considered in the study of any educational plan, especially if it appears to contradict our traditions: (1) A willingness to look at it without prejudice or preconceived opinions; we must at least keep these quiescent. (2) We must consider it as a whole, must see the purpose of this whole; must see that its parts hold together consistently; that no device shall assume undue proportions.

Freedom thru activity is the keynote of Dr. Montessori's method; but this freedom is not flung at the child. He is taught little by little how to make the best use of it. Senses and motor activities are so exercised that he grows into freedom thru his own doing. What he does in this process may seem a small thing to us, but it is not so to him. So long as he puts himself, his whole self, into the act, it is true self-activity; activity for its own sake.

The child unconsciously prepares himself for his daily life-work, whether it be learning to dress himself, or to draw, read, write, deal with number, or in fact to work out any of his little experiences. This preparation thru the child's own doing should be more heeded.

As for the very early training in reading and writing, I confess to a prejudice which may be overcome in time. Possibly the child's desire for this form of expression, springing

from his imitative instinct, may be as natural as his desire to deal with objects which to us, now, seem more concrete than words.

Kindergartners know quite well how definite a child's ideas of simple number grouping may be. Illustration:

A kindergartner asked Jack (four years old) what he was doing with his sticks. "Making believe they are marching" (they were in groups of two). Presently Jack said, "Now they're in fours." The kindergartner said, "I didn't know you could count four." "I didn't count them," said Jack. "I saw two, and I saw two, and I thinked four, then I marched 'em."

I believe the child from two to four or five needs exactly what Dr. Montessori is doing for him; but he also needs the play, song, and story of the kindergarten.

THE BASIC PHILOSOPHY OF FROEBEL

GEORGE F. JAMES, DEAN OF THE SCHOOL OF EDUCATION, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.

Kindergarten teachers are peculiarly fortunate in being drawn for the most part to the work which they are doing in the school system by a definite preference and inclination toward the training of children in their early years. They have the advantage also of a general education extending very far beyond the experience of the pupils under their charge and a professional discipline directed specifically toward efficiency in their chosen field. Within this field, more than at any other stage of public instruction, the theory of education has been developed and methods of its administration established. Vital problems within the field, however, are still pressing for solution and these demands will be met satisfactorily only in proportion as kindergarten teachers get back of the device, the method, and the theory to the fundamental philosophy of Froebel. The theory of kindergarten teaching has been developed on the basis of interest, self-activity, motor training, play instinct, imitation, and particularly on the admirable principle of pioneers in this field, that the educational process is more important than the product, the mode of thinking more significant than the thought, the manner of doing more vital than the thing accomplished. Back of the theory is the basic philosophy of Froebel to which every kindergarten teacher should have recourse as a never-failing spring of inspiration and guidance.

Froebel stands forth as one of the stupendous figures in educational history and every phase of his thinking calls for thoughtful consideration. His basic philosophy has been to some extent overlooked or deprecated by his followers. Some have been inclined to apologize for his symbolism and to condone his philosophic suggestions as irrelevant and negligible altho pardonable in the light of his practical, helpful labors for the school. This attitude does him much less than justice, for even in the vague and scattered revelations of his deeper thinking we get the true explanation of his vitalizing force. Too often the starting-point in the thinking of educational

theorists is disregarded, altho this determines to a considerable extent the scope and degree of their influence. We know Froebel as an effective organizer of principles in early education. Back of the theorist, however, stands the philosopher, and altho we have been inclined to neglect his basic thought because he presents it somewhat obscurely, nevertheless the message of this great reformer was conceived in the depths of his philosophic reflection and only by immersing ourselves in that can we catch the full import of his gospel.

The pedagogic effectiveness of Froebel lies in his philosophy, which was in turn thruout tinged by his religious thinking, and this again was strongly mystical, as is natural, since the root of all religion is mysticism. Many earnest students of Froebel have turned away from this phase of his teachings because the mystical stands in the popular consciousness for the obscure, the unreal, the fantastic, all equally repugnant to a scientific attitude and training. Nevertheless most men and women are mystic in some phase of their thinking and will come thru to a consistent theory of life, not by neglecting, but by analyzing this element of their experience. In the mysticism of Froebel lies much of his power, and a careful study of his basic beliefs will serve to vivify the work of all those who are laboring in his name.

The essence of mysticism lies in a spiritual conception of the universe and a religious attitude toward all experience, which describes exactly Froebel's position. Influenced by the current philosophic thought of Germany, he developed a pure idealism which conceived the universe as an organic unity infused by self-conscious universal life and defined the soul as an individualization of this universal life or reason which comes gradually to a realization intimate, direct, complete, of the encircling universe and the spirit which informs both it and him. The *Education of Man* from the opening paragraph shows how completely Froebel's philosophy is expressed in this mystic attitude, and in his life and writings appears every kind of mystic experience which William James has summarized in his *Varieties of Religious Experience.*

The metaphysical type of mysticism which affirms the absolute unity of all creation sees with Froebel, back of the world of nature and the world of humanity, interpenetrating both, the workings of a spiritual force. In this spiritual force each of these worlds verily lives and moves and has its being and thru it each becomes organically related to the other in a single universe. The world is real to Froebel, MacVannel excellently puts it, because of the continuous self-determination of a spiritual principle involving the process by which the world is maintained as an organic whole. The universe to him is the means of evolution from the infinite and every self is a part of the universal life, each child the struggling expression of an inner divine law.

The religious variety of mysticism finds its essence in the striving of the individual toward union with the divine, and Monroe has pointed out

that this underlies one type of education which in various schools has marked the effort to come into actual and immediate communion with the divine. To Froebel as to all of the mystic brotherhood, "God ceases to be an object and becomes an experience." Everyone is by virtue of the divine effluence within and is capable of attaining to its source; the object of education is to realize this destiny. The development of the individual into unity with the absolute comes thru the working of evolutionary forces common to the natural and to the spiritual world alike. In a real sense Froebel was a pioneer in the theory of evolutionary development in western thought. A statement of this principle appears centuries earlier in oriental philosophy but it did not spread at that time to Europe, and therefore Froebel deserves credit for his quick absorption of this idea from the scientific and the metaphysical reflection of his age and for the logic with which he based on evolution the theory of conscious human growth. The influence of this conception in educational history has been more potent because of his conviction that nature and man alike are coming to a higher differentiation, not thru mechanical causation, but thru the intimate workings of the self-conscious spirit.

A third type of mystic consciousness is marked by a wonderful intensity in ethical experience and reflection. So fully is Froebel a mystic in this sense that many pages from his volumes could be interpolated into the writings of St. Catherine of Siena, St. Francis, or Thomas à Kempis and find in them a proper context. In Froebel also appears the æsthetic variety of mysticism marked by a peculiar intuition as to beauty. The poet and the painter in their moments of exaltation seem to catch the beatific vision most mystically because beauty is the unfailing attribute of creation and lives in its purer forms on higher planes where the consciousness of each begins to merge into the one consciousness. As man knows the divine intuitively because his nature is one with the infinite, and as he sees the unity of all things because he is part of the universal spirit and in transcending experience feels the cosmic throb, so Froebel caught the intuition of the beautiful and made it one primary object of endeavor. The typical optimism of the mystic results in Froebel from his conception of the significance of the universal purpose, his realization of the indwelling life of the infinite, his prophetic vision of the final completion of the evolutionary process, all of these combining to establish a never-wavering faith and an absolute poise and happiness. This most distinctive trait Froebel manifested alike in his teachings and in his life.

If the chance had come to Froebel to work out his plan thru the later as thru the earlier stages of individual growth, he might not have come far short of the world-old method of self-training which the western mystics of the Christian church conceived much as did the ancient teachers of the East and which Hugo St. Victor sets forth in his admirable treatise. However, this development of his thought did not fall within Froebel's oppor-

tunity and we can only infer from the characteristics already noted how far the mystic element might have been developed in a fuller exposition of his philosophy. Perhaps enough has been said to suggest how richly the kindergarten teacher may be rewarded by a study of what has been so far a neglected part of Froebel's thinking.

THE KINDERGARTEN AND ITS RELATION TO RETARDATION

MARY DAVISON BRADFORD, SUPERINTENDENT OF SCHOOLS,
KENOSHA, WIS.

According to the law of my state, Wisconsin, a child there may begin his education at public expense at the age of four years. He is required to go to school from the seventh to the fourteenth year, unless he has completed the elementary course before he is fourteen. At fourteen he may withdraw to work at certain sorts of employment, on condition that he has completed the fifth grade; but if he does so, he must attend for five hours a week, until he is sixteen, a special industrial school provided for such children.

Further details of this law are not needed here: enough has been given to show that Wisconsin is endeavoring to help the 50 per cent of her children who there, as in other states, end their regular schooling with the fifth grade.

It is the consideration of this 50 per cent that causes two problems to assume dominating importance:

First, how to make those first five grades the most profitable possible for all boys and girls, especially for those who, entering late, will, as soon as the fifth grade is completed, be snatched away from school, provided they have attained their fourteenth birthday, or it can be made to appear that they have reached it.

Second, how to bring a larger proportion of children beyond the fifth grade and into the seventh and eighth grades before their fourteenth birthday is reached and thus help to lay a broader and a better foundation for intelligent citizenship.

I cannot deal with the first problem here, but will say in passing that I believe it will be largely solved when the courses in those lower grades and the teachers who administer them have been more thoroly kindergartenized; that is, when there is more general recognition of the educational value of play and of the dominance of the constructive instinct in human nature; when the great psychological truth is better appreciated that thru these early years eyes and finger-tips are the nourishing points of intellect, and when the idea of motivation of all school activities has taken better hold of school practices.

It is with the second problem that this paper deals; namely, that of helping and insuring the progress of children in school, so that their fourteenth birthday will find a larger proportion of them in sixth, seventh, and eighth grades. In the solution of this problem also I believe the kindergarten to be an important factor.

In December, 1910, it became necessary for me to defend the kindergartens of the system of schools of which I have charge, from a movement attempted by the mayor and some of the aldermen. The need of a new school building in a rapidly growing city was felt. The school board was urging an appropriation for the purpose. His Honor visited some of the schools and reported as an argument against the movement that the schools were taking in babies that should be at home with their mothers, and that I was hiring nurses at seventy dollars a month to take care of them. His proposition was to turn out the kindergarten children and thus make room for the others and obviate the need of a new building.

The thing wasn't done, of course, for effective means of defense were within reach and were immediately used; namely, an appeal to the voting fathers of the four hundred little children who would be affected by the mayor's proposed action; and, most important of all, a daily paper willing to publish my appeal. (By the way, I have found that when an educational cause gets mixed up with politics, the phrase "voting fathers" is a shot that does great execution.)

My public contention on this occasion was, as it had repeatedly been at other times when urging communities to establish kindergartens, that since, by the law of Wisconsin, a parent may demand education at public expense for his four- and five-year-old children; that since a child cannot profitably be started in what is commonly regarded as regular school work before the age of six years, and that to attempt this work before that age is a waste of time, if not a positive detriment later; therefore, it is necessary that these young children be provided with a sort of education adapted to their age and their needs. This sort of education the kindergarten affords.

My further contention was (and I would not quote it here, except that it applies quite generally) that in a city like Kenosha where 11.8 per cent of the public-school children are born across the ocean, and where 52 per cent of them come from homes where one or both parents are foreign-born, and in a large number of which homes a foreign language is spoken, the kindergarten serves another very important purpose. It puts children at an early age in command of the English language, so that when they are old enough to be taught to read they can go right ahead with it. Before a child can be taught to read English he must be taught to understand and to speak English.

Thus I explained to these "voting fathers" why I wanted kindergartens for all little children and why I was especially covetous of every little Italian, Bohemian, Russian, Polish, Lithuanian, and Croatian child of four and five years; and how, by gathering these for a half-day for two years under the care of trained teachers, they would at six years of age understand English and be ready to begin to read; how they would have quickened powers of perception, would be able to make with the hands, and express with the tongue, would be trained to self-control and respect

for the rights of others, and be given such a start that their fourteenth birthday would find them well up in the grades.

This was my plea and my reasons for it. Had some hard-headed taxpayer called for evidence that six years was the best age for beginning first grade, or proof that the kindergarten start was an accelerator of school progress and a saver of retardation, I could not then have produced the proof.

Since that time, however, there has come to us, as all kindergartners doubtless know, the convincing result of the wide study made by Leonard P. Ayres of the Education Division of the Russell Sage Foundation, one important phase of which was the investigation of the relation between entering age and subsequent progress among school children. It is, as you know, a study of the membership of the eighth grades of 29 cities and involves 13,867 children. The conclusion he reaches, after a most careful weighing of his data, is that six years is the best age for a child to begin his grade work.

With that question settled for me by a scientifically handled investigation, I undertook to find out by a study of my own small school system whether the kindergarten really did for us the other things claimed; whether those who come to the first grade at six years with kindergarten training make more rapid progress than those who enter without it. This study makes no pretentions to perfection, but it serves to furnish satisfactory proof of my assertions, and was honored by your chairman with being thought worthy of presentation here.

Questions were sent out to all first-, second-, third-, fourth-, and fifth-grade teachers. Those of higher grades than the fifth were not brought into this study because of the fact that in Kenosha the kindergartens have not been in operation sufficiently long or so generally thruout the city as to have representatives in the higher grades in sufficient numbers for comparison.

The teachers were asked to classify their pupils as slow, average, and bright, according to general ability and progress, and then to classify under these heads the number of their pupils who started with kindergarten training, and the number without it.

Second, they were asked to give the average age on June 30 in years and months of the children of these two classes in each of the three groups, slow, average, and bright.

Third, to give the average number of years in school, since entering the first grade, of those with and without kindergarten training in each of the three groups.

The total number of children involved in this study is 1,663, of which 925 did and 738 did not start with the kindergarten. According to the judgment of the 43 teachers entering into this investigation and reporting on their respective classes, 26 per cent of the children are slow, 46 per cent are average, and 28 per cent are bright.

Since, as I have already stated, the kindergartens have not been sufficiently general or sufficiently long established in our city to catch all these children as beginners, and since children of grade age from other places are constantly entering school, it was expected that each of the three groups in each grade would have its portion of those with and those without the kindergarten training. In the slow and average groups these children are found to number respectively 54 per cent and 46 per cent of all.

In the bright group or those making most rapid progress, kindergarten children are 60 per cent, and those without 40 per cent.

This fact, that children with kindergarten training form a larger portion of the rapid group than of the average and slow, seems to indicate that they were better equipped for the race, and so outdistanced in larger numbers their fellows.

Next, taking up the statistics in regard to ages of the children in each of these three groups, a careful figuring of results shows that in each of the groups, slow, average, and bright, in all of the five school grades the kindergarten children are younger than the others. The difference in average age varies from grade to grade, the total average difference for all grades being 8.4 months. This means that all the children with kindergarten training wherever found in the first five grades have an average age which is 8.4 months below that of all the children without such training.

Another question related to average number of years since beginning the first grade. In view of the importance which recent school investigations are attaching to retardation, this part of my study has not the degree of reliability that is desirable. The card system necessary for correctness in such investigations, which system provides a convenient record of the school histories of all school children, has not been in operation long enough to furnish the authentic data needed, consequently, in some instances, the teachers were obliged to rely upon the memory of the child or the statement of the parent. For the greater number, however, especially in the three lower grades, the averages reported by teachers are essentially true.

Assuming that the normal rate of progress is one grade a year, that at the end of June, 1912, each child completing the first grade should have been in school a year, and each child completing the second grade should have been in school two years, and so on up the line, the average error, or amount of time over this standard, for the children in each grade was computed, the two classes, those with and those without kindergarten training, being kept separate as before. From this, an average for all grades was computed.

This average retardation was found to be forty-two hundredths (.42) of a year for all children with kindergarten training and fifty-nine hundredths (.59) of a year for all children without such a start. From this it was readily reckoned that the 925 children of the former class were ahead

of where they would have been without kindergarten training by a total of 151 years and that the 738 children without the training lost a total of 121 years by being thus deprived.

When this saving and loss in years is expressed in money cost it takes on more concrete significance, especially with school boards. Here is a situation, as Mr. Ayres says, where "time" is money.

The average cost per year of children in the Kenosha schools is about $23. From this unit cost it is found that by providing children kindergarten training the city has saved $3,489 on 925 such children involved in this count; and that it has lost, thru the greater retardation of the 738 children who had missed such training, a total of $2,783.

There are two sorts of arguments in favor of kindergartens which superintendents and teachers can use with school boards.

> First: That it is the right of every little child to have the best possible educational start, and hence the duty of school officials to see that kindergarten privileges are afforded to all. Second: That it is the right of taxpayers that there be wise and economic expenditure of school money, and that, therefore, all means for diminishing retardation, and consequently for lessening the cost of education, should be employed, one of these means being the kindergarten. A school board absolutely indifferent to the former of these arguments may feel some power of appeal in the latter, especially when the figures and dollar sign are produced.

My inquiry also contained these directions: Compare children with and those without kindergarten training in these respects:

1. Ability and willingness to sing.
2. Ability to draw, construct, and write.
3. Freedom in language expression.
4. Self-control and ease to discipline.

The limits of this paper will not permit me to give results except the general statement that the majority of judgments favored the pupils with kindergarten training.

As a fitting close, I use an idea derived from Mr. Caffin's new book on *The Relation of Art to Life*, which I have recently been privileged to read in manuscript. The author takes the varying abilities of an individual like Michael Angelo, Franklin, Lincoln, or some lesser person, and shows how each of his powers may be likened to a circle concentric with others about the individual self, some with longer, some with shorter radii. He then shows the analogy of this to the collective genius of mankind. Each human constituent of society has its individual capacity, cuts its own circle upon its own radius about a common center. Mr. Caffin says:

> The scheme presents an infinity of concentric circles, embracing efforts and ideals of all imaginable varieties of scope, each of which is measured by the radiating individual capacity; while all the diverse energies of the individual men and women have their center in a common inventive and constructive instinct.

This truth, which Mr. Caffin has enabled us better to image, the kindergarten recognizes, and until courses of study above the kindergarten and

the teachers who administer them come to a fuller realization of it, there will be retardation—and retardation worse than that which means failure to complete a prescribed course—retardation in the more important sense of failure in children to reach their greatest possibilities—retardation which means the dwarfing of the radius of individual efficiency.

DISCUSSION

ELIZABETH HARRISON, principal of Chicago Kindergarten College, Chicago, Ill.—It is well for us that such men as Commissioner Claxton and Dean James come to us now and then with their clear insight into the profoundly deep significance of the thought which underlies the kindergarten. They reawaken the kind of enthusiasm which overcomes all obstacles and burns up sordid considerations. In the security which the kindergarten has obtained by being accepted as a part of our great public-school system lies the danger of our losing sight of the central idea of the kindergarten. It is more than a sub-primary grade. It is more than an infant manual training or art department. It is more even than a miniature social community where each one finds his rights and respects the rights of others. The fact that it prepares the child for the primary grades as can no individual home training has been testified to by too many grade teachers to need further argument. So too the fact that it begins the training of little hands in the shaping and molding of the materials of the world by which the child is surrounded and thus awakens his interest in the processes of industry is true, and it is also true that a love of beauty is awakened in his breast by the flowers and pictures, the music and song, the stories and childish dramas of the kindergarten. But it has a deeper, far more important mission. It is the new view of humanity, the call of the soul for better recognition of its rights, that has made the kindergarten the leaven which is working in the most conservative schools, broadening and enlarging their curriculum with the living interests of play, of gardening, of workshops, of excursions, of pageants, and the like activities of real child life.

We have lived too long a separate and exclusive class. With the full realization of the increased spiritual life which the true kindergarten brings, we ought to embrace every opportunity that is offered us to enter into new and different fields of work, and thus prove that it is a living, universal principle of deep significance which must be recognized in all of our work, not a method, nor a set of devices.

The great National Congress of Mothers has asked us to come to their help in raising the standards of motherhood. Are we ready and willing to do it? If so, every kindergartner will have a mothers' club and will induce it to become a part of her state organization, the Parents and Teachers Association. We have an influence over mothers that teachers in the more advanced grades do not have, owing to the fact that we come into closer contact with the home, and the mother of the wee tot of four keeps nearer her child in his first venture into the great outside world. As a rule kindergartners have ten times as many mothers visit their schoolrooms as do the grade teachers, and are more often invited into the homes of their pupils. It is a great opportunity and a great responsibility.

Again, an almost unlimited field is opening before us in the organized social service work which is re-christianizing our land. Everywhere we hear the statement made that kindergartners make the best juvenile court assistants, inasmuch as they know how to appeal to and interest the reckless, wayward boy or girl whose home life has not given him or her a fair chance. The heads of social research work testify that the kindergarten-trained woman can get nearer the solution of the problems of the causes of poverty and of matrimonial unhappiness than can the well-meaning, but too reserved worker, because she, the kindergartner, has the key which will always unlock the mother's heart—namely,

a sympathetic interest in the woman's child—and oftentimes can make suggestions which will help the poor distressed woman who cannot afford money to spend on childish pleasures by showing her how to create homemade toys and to plan home entertainments for her children by the children themselves.

Do we fully realize the greatness of the great command to go forth and preach the gospel, the real gospel of love and helpfulness, which has come to us with the gift of insight that our kindergarten study has brought? Of all gifts the gift of insight into the true meaning of life, it seems to me, is the greatest. Sometimes I fear we do not appreciate this, else we would not hear of kindergartners seeking easy places and high salaries. There are kindergartners of today who are selling their birthright to serve humanity in the highest way for a mess of pottage. It is because they have lost sight of the great fundamental religious basis of the kindergarten. When rightly considered it reveals a newer and deeper interpretation of religion in that it not only accepts the doctrine that all men are children of God but proceeds to work for the unfolding of that divine inheritance by understanding and protecting every childish effort at right self-expression and encouraging every loving recognition of others and the glad serving in the little community—all God-like traits that lift mankind out of the narrow, selfish life of personal ease.

While we are here assembled has come the mighty cry from China to send over more kindergarten missionaries—to that long-benighted land now awakening so marvelously. Most of you have read the little leaflet entitled *An Appeal for the Kindergarten in China*. In it come these significant words: "The kindergarten movement appeals to the new sense of power and consciousness of ability in the Chinese women, and gives them the opportunity they are seeking to serve their country." Are we ready to answer the call? If not, let each one of us look into her own heart and ask if we are keeping there the sacredness and the greatness of our calling.

W. N. Hailmann, Normal Training School, Cleveland, Ohio.—We owe much, indeed, to statistics. Yet, in their inferences statistics are prone to deal with externals too exclusively and to neglect the inner springs of life. This inner world it is difficult to reach under the ordinary methods of the experimenting statistician; it reveals itself only thru channels of sympathy. These must be kept open by the experimenter, if he would reach the whole truth.

By way of illustration, I would point to the Elementary Industrial School established in the fall of 1909 in Cleveland by Superintendent Elson. He found in the schools a number of retarded children in the sixth grades who, measured by the ordinary external standards, were two years behind their grades, who had lost courage and had come to "hate school."

The superintendent, who brought to child-study both heart and head, decided to test the matter and to determine whether the children's retardation was indeed due wholly to their lack of ability. For this purpose he established the Elementary Industrial School and gathered into it 136 children in eight classes, five for the boys and three for the girls. The school was not to be a vocational school. Industrial considerations were, indeed, to lead, and the so-called practical tendencies of the children were to be appealed to both in handwork and in academic work. At the same time, no effort was to be spared to touch the deeper springs of personality and to lead them to a broader appreciation of the value of the work.

During the fall of the second year of the school, it was my privilege to inspect its work for a period of two weeks. Among other things, I requested the children of the advanced classes to state to me in short letters what in their opinion the school had done for them, if anything. Some of their replies were truly pathetic in their earnestness. I cannot refrain from reporting a few of these:

"This school has helped me to wish to be helpful to others, and it has taught me to work so that, when I am home, I can help my mother."

"I like this school because I am of more use in the world. I learned how to be a lady."
"In the grade school I felt as if I just wanted to stop, but here the work is so interesting that I don't like to leave it."

From the boys I cull these utterances:

"The lessons were so interesting that I felt as if I was taking a new hold in life. It has taught me what an education means in life."
"This school has made me be more of a man; it has made me have more self-respect."
"The school has helped me to think and to get my work more easily."

Upon graduation at the close of the second year, it was found that these children, in addition to their efficiency in manual and domestic work, had done a full equivalent of the work of the two higher grades of the grammar school for which they had previously been deemed unfit. Thus were they rescued from despair and ruin. The inner life had been touched; purpose had been awakened and established.

And this is what statistics must learn to do, before their inductions can attain full value as guides in educational practice.

Another important factor in gathering data for statistical purposes is the personality of the experimenter. Here, as in the case of the teacher who would judge the child, it is needful that he should take into account himself as an influence upon the child's reactions.

Permit me to add a word as to the metaphor of "concentric circles" as applied to the child's development. It seems to me an unfortunate choice. It involves a sudden jump, howsoever slight, from the circumference of one circle to that of the next. And this is contrary to the fairly well-established fact that growth and development are continuous. Their line of expansion is distinctly spiral.

This is but a corollary of the law of self-activity on which all that is good and best in the kindergarten is based, and which is steadily and irresistibly gaining control in every phase of educational work—the law that bids us seek the elevation of the race thru the child lifted, under our ministering influence, by its own power into realization of ever-higher possibilities.

LIVE STOCK IN PUBLIC SCHOOLS

E. R. DOWNING, ASSISTANT PROFESSOR, THE SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

A generation ago the child was considered a little man or a little woman who only needed to grow bigger. Now we realize that the child is as different from the adult as the monkey is from the child, that the evolution to be accomplished by the child before he reaches adult condition is a long and complicated process. We no longer try to foist on the child our adult interests if we are wise pedagogs, but endeavor to find out what the child's interests are and utilize them in its development.

Children are, as a rule, interested in animals. The teacher in the grades may well make use of them and it is my purpose merely to suggest how she may care for them most readily. I know from past experience that the average teacher thinks it a grave task to assume the care of an animal in the schoolroom. But it is a relatively easy proposition, as animals thrive with little care and usually receive so much that they die of overfeeding or injudicious attentions. If Rosa Bonheur found it worth while to study the commonplace farm animals, or Landseer found the association of his dogs worth while, or a Kipling or a Thompson-Seton considers the

animal worth a place in literature, certainly it is not beneath the dignity of the kindergarten teacher and her children to study animals. The child comes to school from a world of outdoor interests and it is wise to continue them in his school environment.

The aquarium for the goldfish needs in it some aquatic plants. These can be bought with the fish or may be taken from almost any pond in which the water is clean. One or two small fish are enough for an aquarium that is ten or twelve inches in diameter. The fish food bought of the dealer answers well. Rolled oats will be taken with avidity occasionally, but not too much food should be given. Only so much should be put into the aquarium as is promptly snapped up by the fish; and feeding once a week is quite enough. If the plant life is kept fresh the water of the aquarium does not need to be changed.

Rabbits make admirable schoolroom pets. A box $2 \times 2 \times 3$ feet makes room enough for a pair. It may be covered with poultry netting, and a smaller box with a hole in it, to be used by the rabbits as a door, should be put into the larger box so they may crawl into this nest whenever they please. Some sawdust sprinkled in the bottom of the box will help to keep it tidy. The food should be of some dry material. Grain with an occasional bunch of green stuff makes the cage less objectionable than the odors that arise when a good deal of succulent food is given.

Guinea-pigs are treated in much the same way. In a similar cage one can keep pigeons or ringdoves in the schoolroom and watch all stages of their life-history. A smaller cage with finer netting will serve well for white rats. These can be fed on stale bread, and given plenty of old newspaper in which to burrow and make their nests.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—H. B. Wilson, superintendent of schools.....Decatur, Ill.
Vice-President—Julian C. Bryant, principal, Madison school.....St. Paul, Minn.
Secretary—Gertrude Longenecker, State Normal School .....San Diego, Cal.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The Department of Elementary Education met in joint session with the Department of Kindergarten Education in the Auditorium Theater.

(For program and minutes see Department of Kindergarten Education.)

SECOND SESSION—Wednesday Forenoon, July 10, 1912

The department met in the Gold Room of the Congress Hotel at 9:00 A.M., and was called to order by the president, H. B. Wilson, who said that the program of the preceding afternoon was of special interest to teachers in the primary grades of the elementary school, and that the program of the morning offered a subject of interest to all teachers of all grades, the general topic being, "The Economy of Time in Elementary Education."

The first paper, on "The Need of Standards for Measuring Progress and Results," was presented by W. C. Bagley, professor of of Education, University of Illinois, Urbana, Ill.

The president named the following persons as a committee to nominate officers for the ensuing year:

Henry Lester Smith, superintendent of schools, Bloomington, Ind.
F. D. Tharpe, assistant superintendent of schools, Kansas City, Mo.
Charles W. Blessing, principal of School Number 7, Albany, N.Y.

"Suggestions from Cases of Unusually Rapid or Irregular Progress in Public Schools" was the next paper on the general topic, given by E. E. Jones, School of Education, Indiana University, Bloomington, Ind.

The discussion was led by Samuel W. Brown, of San José, Cal.

In the absence of John Munroe, superintendent of schools, Cokato, Minn., who was to read a paper on "Saving Time in the Grammar Grades," the department adjourned.

THIRD SESSION—Thursday Afternoon, July 11, 1912

The third session of the Department of Elementary Education met in the Gold Room, Congress Hotel, at 2:30 P.M.

The Committee on Nominations presented the following names:

For *President*—L. D. Coffman, supervisor of training school, Illinois State Normal School, Charleston, Ill.

For *Vice-President*—Livingstone McCartney, superintendent of schools, Hannibal, Mo.

For *Secretary*—Gertrude Longenecker, University of Chicago, Chicago, Ill.

The nominations were approved and the officers elected.

The first paper under the general topic "The Place of Training in the Practical Arts in the Upper Grades of the Elementary School as a Part of the Program of General

Education and Vocational Guidance," was presented by C. A. Prosser, secretary of the National Society for the Promotion of Industrial Education, New York City, and was entitled, "Practical Arts and Vocational Guidance."

The discussion of Mr. Prosser's paper was opened with a paper by Frank M. Leavitt, associate professor of industrial education, University of Chicago, Chicago, Ill. This was followed by a paper by John C. Brodhead, assistant director of manual arts, public schools, Boston, Mass.

The informal discussion following was led by E. G. Cooley, of Chicago, Ill.

GERTRUDE LONGENECKER, *Secretary*

PAPERS AND DISCUSSIONS

THE NEED OF STANDARDS FOR MEASURING PROGRESS AND RESULTS

W. C. BAGLEY, PROFESSOR OF EDUCATION, UNIVERSITY OF ILLINOIS, URBANA, ILL.

The relation of accurate standards of efficiency in teaching to economy of time and energy in elementary education is direct and unequivocal. The careful construction of such standards will promote economy in a variety of ways. In the first place, it will provide the classroom teacher with a definite goal toward which to direct his efforts; and the lack of a definite aim constitutes a universally recognized source of waste. In the second place, it will furnish a powerful incentive to the pupil; for a standard of attainment that is universally accepted acquires thereby a significance that incites to effort far more effectively than a standard which has back of it only individual or local opinion. In the third place, and most obviously, the construction of adequate standards will enable the supervisor to detect weaknesses in teaching, and either aid him in correcting these defects or justify him in demanding the teacher's removal. In the fourth place, such standards will provide a means of testing new methods, and will prevent the persistence of inadequate, wasteful, and impracticable methods simply on the ground that they are "good" from a theoretical point of view and "ought to work"; and, by the same token, it will be possible to estimate in an effective way the comparative value of different textbooks. In the fifth place, by means of standards, growth in the efficiency of a system of schools may be determined with a nicer degree of accuracy than may now be attained.

It is in the service that standards may render to the inexperienced teacher that I am personally most interested. One who is engaged in preparing recruits for the public-school service is frequently discouraged and depressed by the difficulties of the task. Skill in teaching, like skill in any other art, can come only thru the discipline of experience. In some arts, the discipline has been racial rather than individual: successful

practices are crystallized in complex habits which may be acquired thru the process of imitation, with some difficulty, it is true, and yet without requiring each individual to undergo all of the struggles and failures which made up the thorny path thru which the art developed in the race. Typical arts of this type are the mechanical trades, such as carpentry and metal working, and certain phases of professional activity, such as surgery and dentistry. In other arts, the discipline of previous generations has been concentrated in rules, laws, and principles which the novice may master, again with some difficulty and struggle, and yet without repeating laboriously the toilsome steps of discovery and trial and refinement and revision which make up the long history of human achievement in the realm of accurate knowledge or science. Arts of this type are represented by medicine, law, engineering, navigation, and agriculture.

The art of teaching occupies an almost unique position among the human callings in that its technique can only in part be acquired by imitation, and in that this technique has not yet been adequately crystallized in general principles. As a result, the beginner is severely handicapped in comparison with beginners in other fields of effort. The materials of education he must know, but, however nearly complete his mastery of subject-matter, the problem of controlling children in masses, of guiding their activities aright, and of passing on to them the accumulated culture of the ages, he must meet and solve with very little effective help from the experience of others.

This condition is, to my mind, one of the most serious obstacles to the increased efficiency of our school system as a whole. If Coffman's recently published study of the teaching population is to be trusted, one-half of our public-school teachers are twenty-four years of age or under: one-quarter of the total number are twenty-one years of age or under; one-half remain in the profession only four years or less; a large number leave after one, two, or three years of service. If Ruediger and Strayer are to be trusted in their study of qualities of merit in teaching, we may conclude that it takes the elementary-school teacher five years of actual teaching work to reach a stage of maximal efficiency. The problem in the preparation of teachers becomes, therefore, one of reducing teaching experience to a trustworthy basis, and of so formulating this experience that it may be readily assimilated and applied by the beginner. The construction of standards offers one means—and perhaps the most effective—of meeting this need.

One may perhaps be pardoned for citing a personal experience as illustrative of this point. As a beginning teacher in a one-room elementary school, I developed what I have since recognized as a most deceptive illusion of success. I believed sincerely that I was doing effective work. I was enthusiastic; I liked my pupils and I think that they liked me—certainly they had no reason not to like me, for, as I remember it, I never asked them to do anything that they did not want to do. By dint of

playing the game aright, I got on well with my patrons. But now, as I look back upon those two years, I cannot escape the conviction that the growth that I stimulated in my pupils was negligible, except indeed in a negative direction, where it was all too pronounced.

What I lacked in my own unsupervised apprenticeship was precisely that definiteness of aim which standards and scales would have provided. I was ignorant of what should be accomplished in the way of my pupils' growth in the course of a year, a half-year, or a term; and, as a consequence, I accepted results far below the capacities of my pupils—and also far below my own capacity to achieve had the standard been set. Thorndike's handwriting scale would have been a godsend to me at that time. Courtis' standards in arithmetic, I am confident, would have increased my efficiency during my first term's service to a point far beyond that which I reached after five years' service as an elementary-school teacher and supervisor.

Now I am perfectly aware that a good many teachers have not been handicapped in this way. But I know from my own experience in training teachers that a good many others suffer as I did from this lack of definite standards toward which to work; and I am convinced that much of the wasted and ineffective effort during the first two or three years of the average teacher's service can be traced to this source. Our craft experience, in other words, has not been adequately capitalized.

All this does not mean, of course, that we have not a certain capitalized experience in education from which each generation of teachers may draw some useful dividends. It does mean that this capital is meager in comparison with the magnitude of our task, and in comparison with the great mass of experience that has never been capitalized and never can be made to pay dividends either because it has never been recorded or because it has been garnered without a proper control of conditions. And it is because the conditions under which we work are so complicated and so difficult to control that this poverty of usable experience exists.

I have no retort to make to the critic who tells us that educational science is still far from adequate to its task; we who attempt to train teachers know this, I think, rather more intimately than any layman can ever know it. But for the critic who, ignorant of the intricacy and complexity of our problem, has only sneers for our efforts or a contemptuous smile for our claims to scientific standing, I can only say that, item for item of scientific knowledge, item for item of skill crystallized in practice, our profession is not to be unfavorably contrasted with many of its better circumstanced sisters. It is only when we measure this knowledge and this skill against the background of our problem that we realize the severity of our handicap.

The earliest navigators lacked compass and chart; they had no chronometer to tell them at high noon their distance from the prime meridian; they had no sextant whose reflected image of the sun would indicate their

latitude; they had no logarithms; no knowledge of trigonometric functions; they had no patent log by which they might compute their dead reckoning if the sun and stars failed; they had no barometer to tell of approaching storms. They simply headed their boats in the direction in which they believed their port to lie, and did their human best to get there. It was a wasteful process, but some of them managed to get across.

Slowly thru the centuries the science of navigation was developed and refined. Compass and cross-staff and astrolabe; astronomical and trigonometric and logarithmic tables; globes and projections; great-circle sailing; and finally the sextant and the chronometer: these are the dots that punctuate the long story of man's conquest of the sea—and between these dots are the generations of men who went down to the sea in ships and did their best with the instruments and materials at their command.

It has seemed to me that there is a closer analogy between the art of teaching and the art of navigation than between teaching and some of the other professions with which it is so frequently and often so unfavorably contrasted. Navigation has the advantage because its principles are now clearly understood. It was once confronted as we are by a problem complicated by a multitude of factors, the resolution of which seemed hopeless. And yet, one by one, the values of these irritating x's and y's have been slowly and laboriously determined. Education must travel by the same road of patient and painstaking investigation.

Navigation deals with material forces; teaching deals with forces that men for ages have looked upon as intangible, unmeasurable, and irreducible to formulas and equations. Some of us have even gloried in the fact that we were dealing with forces that we did not understand and have found a peculiar consolation in the belief that they never could be understood. Some have felt—and sincerely enough—not only that the reduction of these forces to law and order was impossible but that to attempt it was little less than sacrilegious. Happily or unhappily, this attitude has changed. We have come to see that playing with forces that we do not understand is hardly a pastime to brag about, and that there is only Job's type of consolation in putting forth effort that is barren of results. Gradually it is being borne in upon us that the world of mind, like the world of matter, is governed by law; that the progress of school children in the acquisition of knowledge and skill can be measured if once we learn how, and must be measured if we are to know whether we are going toward the particular port for which we sailed or are merely drifting with the current. We have long had our educational "aims" but too often they have given us no aid because they have been formulated in terms too remote to connect with the situation that is here and now. We are now feeling the necessity for reducing these aims to a series of mediated and subordinate and tangible ends, the attainment of each of which will lead to the next. It is no longer sufficient to say that education must develop moral character: we must

know what habits and what items of knowledge and what ideals we must engender in our pupils in order that moral character may be achieved. It is no longer sufficient to say that the high school must prepare for life; the American high school at its inception had this aim clearly and beautifully formulated, but along came someone and said:

> If you teach your pupils this subject, and impart to them such and such information, and drill them into such and such habits, you can fit them for college.

The latter prescription was definite; the teacher, as Professor Jackson has suggested, knew how to give a definite type of information and fix a definite set of habits fairly well; he was at a loss to know how to prepare his pupils for life. It was too large an order for him, and so he did the definite thing —not because it was easier nor because he wanted particularly to do it, but because it was something that he knew how to do. We now see that if we are to realize so large an aim as fitting pupils for life, we shall have first to analyze our problem into its elements, and formulate it in terms of educational products or outcomes—factors that we can describe and measure in a fairly definite way. So long as we speak of educational outcomes in vague metaphors, or in the loose terminology of popular speech, just so long will the progress of our art be governed by the blind principle of trial and error.

Thus far the work of constructing standards in education has proceeded in two different ways, really giving us two types of standards, both of which are necessary. The first type is represented by the definition of the "unit" in the high-school program of studies; agreement as to the number and kind of units that will be accepted for college entrance; and similar definitions which have resulted from the pioneer work of the Committee of Thirteen and of the North Central Association of Colleges and Secondary Schools. Similar standardization of terminology has been proposed for higher education by the Carnegie Foundation. This type of standardizing work is important and valuable, for it clears up the confusion due to equivocal and overlapping terms, and paves the way for the construction of standards of the second type.

This second type of educational standard is represented by the work of Binet in his scales for measuring general intelligence, of Thorndike and Ayres in the construction of their penmanship scales, of Courtis with his arithmetic standards, and of Hillegas with his standards of English composition. The construction of these scales means something more than a mere agreement among educators as to what shall be the content of certain educational terms. It involves a determination of what average, subnormal, and supernormal children are capable of accomplishing under given conditions of growth and training.

It is in determining and defining these norms of growth and achievement that a goodly share of our investigating and research energy may be profitably expended during the next two or three decades. As yet, only the surface has been touched. There is scarcely a field of educative activity in

which it is not possible to promote economy by determining thru careful investigation what the normal pupil may accomplish in a given time and constructing standards upon the basis of these investigations. It is chiefly in connection with the subjects that are primarily drill or habit-building subjects that the pioneer work has been done. But in every subject certain habit-bases may be laid, and these bases may very profitably be reduced to norms. What dates should be memorized in the study of history? What rules are either essential or valuable as outcomes of instruction in grammar? What automatic bases are important in geography?

And with reference to outcomes of teaching other than specific habits, I am not without confidence that persistent investigation will do much to enable us to measure teaching efficiency far more adequately than it can now be measured. Whether principles have been effectively taught—whether they have been presented or developed so that the pupil not only understands them, but is also able to apply them to the ordinary situations of life—this we should sometime be able to test in a satisfactory and helpful way. Whether ideals and attitudes have really been made important and dynamic factors in our pupils' lives ought not to be beyond our ken as it usually is today.

The grave danger that is involved in the present keen interest in the construction of standards and norms lies, of course, in the temptation to forget or neglect the more intangible outcomes. Educational doctrine today is giving vastly more attention to habit-building processes than it did ten or even five years ago. In some respects, we are witnessing today, in educational theory, a renaissance of drill. This is distinctly a step forward, altho it looks at first glance like a reactionary movement. Its reactionary features, however, are likely to be intensified by the clean-cut definiteness that characterizes the new standards. It would be very easy to concentrate attention upon the standards to the detriment of the methods by means of which we bring our pupils up to the level that they represent. It is obvious enough that this would be a distinctly backward step.

It is necessary to remember, then, that while the construction of standards is a task of paramount importance, while it is perhaps the most promising field that the scientific study of education has so far exploited, it is not the only task that confronts us. If the history of our art teaches us anything, it is that nostrums, panaceas, and universal cure-alls in education are snares and delusions. In a field of activity so intricate and so highly complicated as ours, it is both easy and disastrous to lose the perspective. To keep this clear perspective must be our constant struggle. We must give up the notion of solving all of our problems in a day, and settle down to patient, painstaking, sober, and systematic investigation. In our craft, the attitude of finality is fatal.

SUGGESTIONS FROM CASES OF UNUSUALLY RAPID OR IRREGULAR PROGRESS IN PUBLIC SCHOOLS

E. E. JONES, SCHOOL OF EDUCATION, INDIANA UNIVERSITY, BLOOMINGTON, IND.

It is significant that in the recent scientific study of education few statistical studies have been made upon the youth who show exceptional ability in the public schools. All sorts of statistical studies of great importance have been carried on to determine quantitatively and qualitatively mental deficiencies of different groups of children, but, so far as the writer knows, no study has appeared which traces the history and development of exceptional children from the time they enter school until they are distributed thru promotion to the secondary schools and higher institutions of learning.

This study is a meager attempt to begin such a work. If it is important to know and score the intelligence of the child who at best can never attain to anything more than mediocrity, certainly we are warranted in undertaking an investigation which will throw light upon that class of children who, by their intelligence and activity, are distinctly superior to their fellows. Obviously it is from this class of youth that we are to expect leadership rather than from any other, and if a careful survey of the actual productivity of this class will reveal to us any classification of subject-matter, any methods of gradation and promotion whereby the supernormal child will come to his highest development, certainly we have hit upon a field worthy of the most careful investigation.

The data for this study have been gotten from the records of thirty-six different city and town systems in the Middle West. Two hundred and fifty-seven children of exceptional ability have been studied. The method of procedure was as follows:

A personal letter was written to the superintendent stating briefly the purpose of the investigation, and asking his co-operation in securing all information possible concerning the supernormal children under his supervision. He was asked to provide copies of their complete records in the schools, both as to attendance and scholarship. He was asked to secure personal statements from teachers and others as to the general ability of these children, and if possible give all the data necessary for the accurate diagnosis of each child studied. An exceptional child was provisionally defined as one who had skipped at least one grade in passing from the first grade in the public schools to the high school.

Obviously there were some difficulties. First, it was difficult to find from all the lists sent in those who had remained in the same system for the period of time covered in completing the eight grades. Second, owing to the inadequacy of the records, the times of, and reasons for, promotions were rather difficult to obtain. Third, statements of teachers concerning individual children varied so greatly as to make them rather unreliable in

tabulating data. Notwithstanding these difficulties we were able to make classifications and gradations among the exceptional children studied which will throw at least some little light upon the difficult problem.

There has been little attempt to classify supernormal children. They have usually been lumped together, forming a small node at the upper end of the probability curve, with little distinction among them as a group. The present study, however, reveals clearly several distinct types, with differences even more marked than we are able to find in subnormal or normal children. They, as a class, present more diversified interests, show greater individual differences, more marked traits, and more highly specialized mental functions than any other group. One brilliant child differs from another as much as, and more than one brilliant adult differs from another. This seems true because of the fact that the child's brilliancy has not been dimmed by the traditionalism of school instruction, but shines forth in its native light. The brightness of the exceptional child's mind is not determined by habits educated into his nervous system, but by inherent and instinctive endowments and neural connections which cannot be acquired at any cost of training. For these psychological and neurological reasons his traits are marked and distinct and superior, and we find in the exceptional child the most highly differentiated mental traits to be found anywhere in the whole gamut of mentality.

On the basis of the data received for this study, 257 exceptional children from thirty-six different cities and towns have been classified and grouped. The grouping is necessarily rather roughly made, but it is of sufficient accuracy to show tendencies among such children, and is certainly as accurate as the ordinary classification and gradation of children in the public schools. In fact it is chiefly based upon the record grades in the various systems, tho in some instances individuals were ranked higher or lower as the circumstances seemed to justify. Two factors usually entered into the ranking of these children: first, the number of years it took them to complete the work of the eight grades; second, the character of the work done as shown by the actual records of the child. The following ranking of these children, therefore, may be of service to teachers in dealing with the problem of classification of supernormal children, and it may serve as a tentative basis of classification for future investigators in this important field of experimental pedagogy.

Rank I.—Seventeen children appear in this group. They show excellent ability in all the grades and completed the eight years' work in five years. It should be said of this group that each individual in it is robust in health, strong in mental development, and possesses many of the traits of true leadership. The children in this group are not always models in deportment, but they possess a balance and poise of character and ambition to do well which steers them pretty clear from serious trouble, even tho there is occasional complaint from the teachers. They are regular in

attendance, and are usually (90 per cent of the cases) from good parents of the well-to-do class, most of whom have had at least a high-school education or its equivalent. The children whom we have placed in this highest rank are a distinctly superior class of individuals. Not all of them have shown such brilliancy early in the course, but it has in every case appeared by the time the child has reached the third grade, and the skips in grades are about evenly distributed from the third grade on. Evidently home training and home inspiration have a great influence on this group. There is much evidence in each one of these seventeen cases that in addition to the great native ability of the child there is careful parental supervision and close co-operation with the school authorities. Ten of these children started to school at six years of age, six at seven years of age, and one at eight years of age. There are no visual or auditory defects in these children worthy of mention, and their health is uniformly good thruout the period studied.

Rank II.—Children falling in this rank show very much the same character of ability as in Rank I, but do not appear to be quite so robust; their attendance is not always perfect, and their capacity for work is not so high. They all complete the eight years' work in six years. These children are highly intelligent, tho possibly they could not be counted as brilliant. It is my opinion, however, that there are three or four children in this group who could very easily have been brought up to the equal of Rank I, if they had not had the handicap of poor parental training and encouragement. Out of the 257 children I have placed twenty-four in Rank II.

Rank III.—Fifty-six children fall in the third rank, and constitute those who have completed the eight years' work in seven years. These children fall a little below Rank II in general ability and all-round efficiency, yet it must be borne in mind that they are a supernormal class of individuals. It is my opinion that as many as twelve in this group might very easily have been crowded up into the second rank, if all the conditions had been favorable, and one or two might possibly have found their way up into the first rank. One boy in this group, of superior mind, met with an accident which kept him out of school a good part of one year. He might easily have fallen in Rank I had he been permitted to pursue his studies continuously, and had he received the excellent parental care of those in Rank I.

Rank IV.—This is the median group of the exceptional children studied, and represents eighty children possessing general ability a little lower than those of Rank III, but who managed to complete the course also in seven years. Their grades are not so high as the preceding group, and they do not show such originality, yet they are hard workers, and at some time during the period were able to skip a grade. There is a strong probability that quite a number from this group could have been made to appear in the group above. Some of them would have distinctly fallen in the group below, had it not been for the marked influence of good homes and very hard work.

Every child in this rank stands distinctly above the median of the children in the grades, and represents the middle class of a distinguished group of children. This group must not be confused with the median group of all children attending school.

Rank V.—Fifty-two children fall within this rank. They possess only fair ability, but are exceedingly careful workers, and at some time during the course managed to skip a grade, completing it in seven years. This class is distinctly marked and has characteristics of its own. In native ability its members fall clearly below those in the rank above, but in point of effort are fully their equal. The parental inspiration too is wholesome, and we see here a good illustration of the achievement of individuals of only fair ability thru the proper training in the home, and individual effort on the part of the pupil. With other environmental conditions some members of this group might be found in the group above or in the group below. Lacking in native ability, they are more subject to the ordinary educational treatment than the groups above, and consequently do not show the distinguished traits of the preceding groups.

Rank VI.—From the 257 children studied, twenty-eight of excellent ability are given a position of sixth in rank. They are placed so far down in the scale because they have evidently depended entirely upon their brilliancy to carry them thru the work of the grades. They appear to be lazy, their attendance is somewhat irregular, and while at some time they have been allowed to skip a grade, at some later time they have lost a grade, or had to repeat a grade or a portion of a grade. The reasons usually assigned to their falling-back in the latter part of the course, is that their former promotion made them conceited, and thenceforth they put forth no effort, became less and less studious, finally failing to complete the course in less than eight years. This group too is rather distinct and clear. There is a certain type of child that cannot stand success. They may possess considerable brilliancy, and have great power of concentration and efficiency at times, but there are lapses, and on the whole the lack of continuity in the effort brings them to a position not above the average of the regular students in the grades, who complete the course in eight years.

Rank VII.—Only seven children out of 257 are placed in this lowest rank. They have good ability, and in certain traits are really very superior, ranking possibly as high as the second or third groups, but as a usual thing are poor workers. The only claim that the children of this group can have for being above the normal is that they too have all skipped a grade at one time or another in the grades. Either thru the partiality of the teachers, or thru an extraordinary spurt on their part, they have achieved this one distinction, but this achievement has been more than counteracted by the fact that they have all fallen back a grade at least, and some of them as much as two grades, consuming nine years to complete the eight years' course. This group represents a clear case of dissipated effort and wasted

energy. They have plenty of ability to have ranked as high as the second or third groups, but indifference and lack of concentrated effort brings them to the bottom of the scale.

It is only proper to say that the effort to rank all these children correctly met with great difficulty. Coming from different school systems with different standards of scoring made the problem rather perplexing at times. However, the different systems of scoring were reduced to a common standard, by which each individual child was measured, and it is thought that the individuals are placed approximately within the groups to which they belong. At least the individuals are as accurately placed in the scale as they would be in any of the systems to which they belong.

The educational suggestions from the above study seem quite obvious. We have here at the upper end of the curve of distribution a distinct node of intelligence and ability to which we have given little attention in times past. Educational procedure is arranged for the average child, and the supernormal is made to conform to this average as nearly as possible. This is done very largely for economic reasons. From the data in this study it is evident that we are now confronted with several problems. I suggest them merely as problems, because at the present time there is no solution at hand, and there is little evidence that educators see the full significance of the problems in the education of a democracy.

I. There is a great economic problem involved in the provision of adequate instruction for all of these ranks of exceptional children. Education in a very few years will cost twice as much as at present; hence the economic problem is probably the first one to be solved.

II. There is a distinct problem in the correct training of teachers who will be qualified to teach such children. Obviously the ordinary grade teacher who is professionally trained for the great average of childhood is unqualified for such work. There should be developed a teaching class exceptionally qualified to deal with brilliant children.

III. The problem of the readjustment of the course of study to meet the needs of brilliant children has hardly been touched by first-class thinkers and experimenters. Here is one of the most fruitful fields for experimental pedagogy.

IV. Seventy-two per cent of all students in the first four ranks are girls, and 63 per cent of the students in the three lowest ranks are boys. Here then is a distinct boy problem. As was indicated above, many of the ones ranking low were thus placed, not because of lack of ability, but because of lack of effort. This is notably true of the boys. The method of instruction and the content of the course of study should be modified so that the boy who ranks seven may be made to rank two or three or four because he has a profound interest, and all of his powers are employed. The data that I have show that the course of study is feminized, as well as the teaching force. It is time that we analyze the course of study from the sex standpoint and give each sex what it needs.

V. It is my judgment that university schools of education and boards of education and private endowments should establish elementary schools for exceptional children, where they can be under the most careful statistical study for a series of years. It is only by such means of experimentation that we can hope to reach scientific conclusions upon the question of the education of the brilliant child.

In conclusion I should say that we are under the deepest educational obligation to this distinguished group of children. From it must come our greatest thinkers and greatest workers. There must be adequate provision for all the different ranks of intelligence among this superior class, if they are fully to express themselves in intelligent reactions to society. Education in a democracy means the functioning of the school completely for every child of every rank.

PRACTICAL ARTS AND VOCATIONAL GUIDANCE

C. A. PROSSER, SECRETARY OF THE NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION, NEW YORK, N.Y.

In spite of all the other excellent things which our public-school system does for childhood, most boys and girls leave the portals of the schoolhouse to enter all kinds of wage-earning occupations not only untrained but undirected as to what they ought to do in life.

More than 6,000,000 boys and girls between fourteen and eighteen years of age are employed in various ways in this country. This does not include the additional army of children in some of the southern states leaving school at the tender age of twelve. During the present year at least 2,000,000 more childish wage-earners upon reaching the age of fourteen will enter the ranks of industry. More than seven out of ten of this multitude did not finish the work of the elementary school. More than three out of four of them did not reach the eighth year of the schools, and more than one out of two the seventh year. Almost half of them had not completed the fifth-grade work. Great numbers of them were barely able to meet the test for illiteracy necessary in order to secure working certificates which in most of the states is a test on the work of the fourth grade.

These children not only entered life deficient in the elementary-school education which our day regards as being necessary to the civic intelligence and the vocational efficiency of everyone, but practically all of them had been trained by a formalized process in the things of the books alone, which gave them no opportunity to find what they would like to do and what they were best able to do in life. Practically all of them went to work without proper vocational direction and guidance. All of them found the doors of most of the skilled and desirable industries closed to them until they should become sixteen years of age.

Since they must work somewhere, most of these childish wage-earners find their way largely by accident into low-grade skilled or unskilled occupations—the great child-employing industries and enterprises which are always wide open at the bottom to receive young workers but closed at the top so far as permanent desirable employment is concerned. Here because their work lacks purpose and hope they drift about from one position to another, changing in some states, it is said, from one unskilled position

to another on an average once every four months. The resulting moral degradation to the child and the tremendous cost to the employer due to this indifferent, unstable, fluctuating service cannot be estimated. For most of these children the years from fourteen to sixteen spent in wage-earning in store and shop and factory are wasted years, since they find themselves at sixteen in the same position as at fourteen—starting life without any adequate preparation for wage-earning. Their menial, monotonous, more or less automatic work not only gives no skill which will be useful to them in after-years but also arrests rather than develops intelligence and ambition.

Out of the great army of children who leave the schools at fourteen to go to work and get from those schools no further attention come the ne'er-do-wells, the loafers, tramps, gamblers, prostitutes, and criminals, for whose care the state spends more money in penal and correctional work than it would have cost to have prevented, thru proper vocational guidance and training, many of them from becoming a burden and menace to society.

In the absence of any work in the elementary schools which discovers the taste and ability of children, many pupils after receiving the graded-school diploma elect the high school when it does not give the training which is best suited to their needs and to the kind of work they are to do in the world. They do this largely because they have not found themselves and have not come to realize either the kind of work which they are destined to do or the kind of training which would best prepare them for it.

All boys and girls are, in the neighborhood of fourteen years of age, required to make a choice of some kind. They decide first of all whether they are to attend school longer or go to work. If they are to attend school they must decide what kind of school they are to enter. As vocational schools, or departments, are established to meet the needs of those who are not destined for business and professional careers, every pupil ought, as the result of his previous training, to be in a position at fourteen years of age to make an intelligent choice of the occupation which he desires to follow or the kind of training which he wishes. This can be done only by some system of instruction in the upper grades of the elementary schools which will test pupils out by other things in addition to arithmetic, spelling, reading, writing, and other traditional subjects of a general education.

The results of our failure thru the schools properly to direct and train all the children of all the people for useful service are unmistakable. Misfits in all vocations confront us everywhere. Many workers are inefficient because they are not adapted to the work they are doing and some because they have not been properly prepared for it. This lack of efficiency constitutes a permanent handicap not only to the worker but to the calling which he follows. It means lessened wage, uncertain employment, failure of promotion, economic struggle, waste in the use of material,

poor workmanship, reduced output, and the lowering of the standards of skill and workmanship of American industries.

We talk much today of the necessity of conserving our natural resources. Let us not forget that the richest asset which this country possesses is the practical and constructive ability of the children who sit in our schoolhouses today and who are to be the workers and the leaders in industry of the future and whose talent and aptitude, whatever it may be, can be uncovered only by some system of training within the schools that will give it a chance for expression. Every consideration requires that every worker should have a chance to discover and to develop to the full all his possibilities, both for the good of himself and for the welfare of the social order. It is idle for us to talk much about conserving our natural resources until we have by a system of vocational guidance and training developed a type of intelligent, skilled workman in shop and home and farm who will so deal with the products of our soil and our mines as to eliminate waste and transform them into products of higher and still higher value.

Above all, we must in some way secure a better adjustment of every worker to the calling in which he can work most successfully, so that he may have the joy that comes from a sense of achievement, and experience the uplift that blesses every man who finds himself employed at a task in which he is interested and at which he is able to render a service creditable to himself and beneficial to his fellows.

Vocational guidance and vocational education are necessary in meeting the problem of fitting the great mass of our people for useful employment. Each is the handmaiden of the other and each is indispensable to the success of the other. This paper will confine its attention largely to the question of how vocational guidance may be best given boys and girls at fourteen years of age.

Two things are necessary in any successful program of vocational guidance: a greater knowledge of the child than we have thus far obtained thru the work of the schools, and the close co-operation of agencies other than the schoolmaster in the attempt to give advice and counsel to the child as to his choice of a life-work.

No vocational counselor, however competent and however devoted, will be able to deal with most children at fourteen years of age unless he knows more about their taste and ability than the fact that they have made this or that percentage in spelling, reading, arithmetic, geography, history, and other public-school subjects. Such a record may determine whether or not the child is destined for high school and for college; it does not at all reveal the other tendencies and capabilities of most pupils. It is equally true that the vocational counselor must, if he would be successful, learn how to secure in some way the active, helpful co-operation of laymen drawn from many different walks and occupations in life who will be able

to give him and those children with whom he deals the benefit of the experience which they have had and serve as big brothers and big sisters in the task of helping the adolescent boy and girl to find themselves.

The greater knowledge of the child which we need to have in order to give vocational direction is to be obtained only by some system of training within the schools the children between twelve and fourteen years of age which shall help us to find out what they would like to do and what they are best able to do.

Under the comparatively simple and primitive conditions of farm and village life of an earlier day, the experiences the child went thru in his environment on the farm and in the village uncovered his interests and his ability largely without the aid of the schoolroom. The little red schoolhouse on the hill still tested him in the things of the book; his environment tested him in the things of life.

The boy came in contact with a round of activities which were distinctively educative to him in the practical affairs of life. He sowed while the father plowed. On rainy days he tinkered with the farm machinery in the barn. When he was not able to repair it, he took it to the village hard by and helped, in a humble way, the artisan there to do the work. In the village he came into rather intimate contact with the work of the blacksmith, the wheelwright, the saddler, the carpenter, the shoemaker, and all the other skilled trades which the community afforded.

Out of this experience with the realities of things, certain undoubted benefits came to the boy. The experiences he went thru were distinctively educative to him. He learned to do many things by doing. He touched the realities which in themselves gave insight and power. There can be no doubt that the success which the little red schoolhouse was able to obtain with its term of school, its inadequate facilities, its poor teachers, measured by our modern standards, was largely due to the fact that the pupils came to the school with a background of life-experience and a knowledge of the things which the book only photographed and symbolized, which inspired them in a short time and under unfavorable conditions to master the things of the book.

This experience was distinctively socializing. The boy came in an elementary way to understand the trials and difficulties, and achievements, workmanship, and ideals of the artisan. No matter what he became in after-life—the judge on the bench, a lawyer at the bar, a doctor driving lonely roads at night, a teacher in the schoolroom, an artisan following one of the trades which his community needed—he carried into his life-work a sympathetic understanding and appreciation of the work of his fellows that rendered him measurably more capable in his own and bound him and them together in a bond of appreciation and understanding.

Out of this work came a very sensible vocational guidance. The father and the boy and the neighborhood came to know what the boy was interested

in and where his largest success would be made. With the doors of the trades opening up before him at the close of his elementary schooling, he was able to choose and to follow in content and with success the work for which he was best fitted.

It should be said by way of passing that this elementary experience during his childhood days with the tools and processes of different occupations, particularly the one in which he became interested, gave him considerable elementary preparation and understanding of the work which he was to follow and was a distinct benefit to him in mastering it in a more serious and thorogoing way when he came to his adolescent years.

It seems clear to all of us that, under the conditions of modern life, the opportunity of the boy to secure such real experiences outside the school has, to a very great extent at least, disappeared. Trades have become factoryized. Large-scale production not only has taken the ownership of tools from the worker but has harnessed him as a machine-hand to one machine under the shop roof where he may serve all his days in carrying on one process, making one small part of the finished output of the establishment. Seldom, if ever, does the boy of tender years have an opportunity to get beyond the factory gate to even witness the work which is being carried on behind it.

Children have become herded together in great cities; the population is becoming more and more urban; children live huddled together in apartment houses; even playgrounds are difficult to secure. The school term has been lengthened from four months to ten and the pupils are being crammed and saturated with the facts of the book, which at best are only photographs or summations of the life-experience denied most of them. Of course, children do have life-experience, but it is the experience of the superficial observer of rapidly changing phenomena around them and not the kind with which in former days they had an opportunity to come into intimate contact and in which they were able to participate actively with brain and with hand.

All the arguments that are being used today to show the necessity of vocational direction and guidance for children facing the complexities of our modern industrial and commercial life point at the same time to the need of securing for children in some way the kind of life-experience, before they become fourteen years of age, which will give some basis upon which they, and those guiding and directing them, may deal intelligently with the problem of placing them in proper schools, of giving them proper training, and of placing them in the callings of life for which they are best suited.

If it be admitted that practical experience with the realities of things is a necessary part of the training of the child between twelve and fourteen years of age, and if it be admitted further that under modern conditions it is not possible for the child to secure this training as he should in his environment outside the school, then the duty and responsibility rest upon the

school as the agent of the state for the welfare of childhood to give it under the school roof.

There is a sense in which it may be truthfully said that to a very great extent in the past the result of the training of the elementary school, and of the high school as well, has been to select by elimination, closing the door from time to time by a system of tests and examinations against all those who were not able to respond successfully to the kind of studies that were being offered in the schools and to the demand upon the capacity of the child in dealing with abstractions. More and more, in our theory of the American public-school system, we are swinging around to the idea that it is to be the mission of the schools in the future to select by testing and training—to adjust boys and girls for life by having them undergo varied experiences in order to uncover their varied tastes and aptitudes and to direct and to train them in the avenues for which they display the most capacity.

Such a program as this would require a differentiation of the course of study for pupils between twelve and fourteen years of age. The amount of difference in the course of study for different kinds of pupils in any given school system would of course depend upon the size of the city, the extent of its resources, the size of the building, the number of different groups of pupils dealt with, and the size of each group.

In a city of 50,000 people, the usual elementary school might well offer for the seventh and eighth years a high-school preparatory course, a commercial course, a household arts course for girls and a practical arts course for boys. All the pupils from these different groups could well take in the same classes, if necessary, the same work in English, history, civics, music, drawing, penmanship, physical training, which would occupy at least half of a lengthened day in the schoolroom. They would separate from each other for different work in the lines in which they were being tested.

Pupils in the high-school preparatory course, who were in it because it was already determined that they were to go to high school and to college, could take courses in elementary algebra and in a foreign language. The elementary algebra would be as good, or better, training to meet the demands of the high school as any other course. The foreign language could then be taken up at a time when the child was better prepared to deal with it. It is a well-known fact that one of the great difficulties in the teaching of foreign languages in the high schools is that pupils take them at a time when the language instinct is at the ebb rather than at the flow.

Pupils taking the commercial course would be those who were going out to commercial life at fourteen or going into the commercial department of the regular high school, or going out to the private commercial college, or who intended after the regular high-school course to fit themselves to enter business life. These should take in the differentiated work rich courses in the keeping of simple accounts, commercial arithmetic, com-

mercial geography, and probably be given some elementary experience in handling a typewriter. Such commercial arithmetic and geography is just as good as any which the schools have ever offered, and, because it appeals to the interests of these pupils, is better than any other.

Girls taking the course in household arts between twelve and fourteen would be girls who were going out to the factory to spend, on the average, six years before taking up home-making in their own homes, or girls who were going home at fourteen to stay with mother, or girls who were going to the high school for a year or two and then going home to await marriage, or girls who expected to take the household arts training offered by the regular high school. These should have rich courses, in a lengthened day, in cooking, with the how and the why of the work; sewing and hat-trimming with the how and why; sanitation and hygiene of the home; household decoration; and some little elementary experience in the problem of the care of the sick.

Boys wanting the training in practical arts would be boys who at fourteen were going to make a choice of some wage-earning occupation, or who were going to enter some industrial or trade school, or who were going to take the manual-training work in a regular high school or enter a technical high school. These should have rich courses in the practical arts, with the how and the why of the process given whenever possible, industrial arithmetic, industrial geography, and elementary drawing closely related to the work which they were doing in the shop.

The high school claims that what it wants is trained minds rather than any particular content or book experience leading up to its work. If this be true, then any one of these courses is as good a preparation, at least for the general course in the high school, as any other course of instruction. Pupils taking any one of these courses who should decide after graduating from the elementary school that they wished to attend the regular high school would be in as good a position as any other pupils to take its work. So far as "the door of opportunity" leading out to the regular high school is concerned, they would not be injured, to say the least, by the kind of elementary-school experience which they had received.

Nor is there any reason why between the ages of twelve and fourteen a flexible arrangement of the school program should not permit the pupils in any one of these courses to receive some experience in some of the other courses as a test of their interest and their capacity.

It goes almost without saying that after such an experience in the upper grades of the elementary school, boys and girls upon graduating would be in a position to face either some calling or further schooling, much better prepared to make an intelligent choice of what they should do than they can be under the present school régime, thru which many of them come to know only that they have or have not been able to respond successfully to the tests which have been set up in the academic work.

Where courses in the practical arts, including the household arts, are offered in the seventh and eighth years of the work, the administration should be so flexible as to permit boys and girls twelve years of age, who were retarded in their work so that they had not reached the seventh year of the course, to receive the benefit of the instruction irrespective of the question of where they might be located in the graded schools. This training in the practical arts would probably be of more benefit to retarded boys and girls than to any other. Practically all of them will leave school at fourteen years of age, or seek to enter an industrial school. They must make a choice of some wage-earning occupation. They need perhaps most of all to have such experience between twelve and fourteen years of age as will help them when they reach the close of the period of compulsory education to make an intelligent choice of an occupation. Every experience goes to show that these retarded boys and girls who were not able to measure up to the things of the book are able to learn by doing. When they are taught such subjects as spelling and arithmetic in connection with the work which they are doing with their hands, they are able to grasp them much better because they are being taught on the basis of the actual experience which they are receiving.

This paper will from this point direct its attention entirely to the question of training in the practical arts for boys between twelve and fourteen years of age. If this training in the practical arts is to help boys to find themselves in order that at fourteen they may make an intelligent choice of their work for the future, it must be varied. A course in wood working, excellent as it may be, only reveals whether or not the boy responds to it with his interest and his aptitude. A course in metal working alone will determine only whether or not he is adapted to that work. A course in printing alone shows whether or not he has any tendency toward the printer's trade. What we need is not a course in wood working, or a course in metal working, but an organization of training in the practical arts during the seventh and eighth years which will include experiences drawn from many different fields of employment, such as wood working, metal working, electrical working, printing, book-binding, leather working, clay working, gardening. These should not be known as courses at all, but should consist of a series of jobs, projects, enterprises, tasks—call them what you will—taken some from one field and some from another. The progress of the boy thru the school in a given year should be stated in terms of a series of experiences, some of them in wood, some in metal, some in printing, some in electrical work, etc.

The boy should follow these as a series of carefully graduated experiences, each one being taken up when, as the result of his previous training, he was able to deal with it. The work might be arranged so that he would give his time in the shop for a certain period, a month or so, to wood, then to metal, then to electrical work, then to printing, etc. It is believed, however,

that the best results would be secured by having him assigned jobs from different fields rather indiscriminately, a job in metal working following one in wood; a job in electrical work following one in printing These shop tasks he should follow individually rather than as a member of a group. There is no reason why all the pupils in the class should be working upon the same kind of a job at the same time nor that they should be working upon different jobs from the same field of industry at the same moment.

A course of training in the practical arts like that described above would require a varied rather than an extensive equipment. Instead of duplicating tools and machines so as to provide every pupil with a carpenter's bench, every pupil with a case of type, every pupil with a lathe, every pupil with a doorbell and battery, just a few pieces of equipment, requisire in order to give the boy experience in any occupation, would be necessary, the pupils being taught individually and being shifted about so as to permit the varied equipment of the shop to keep them all busy at different tasks. The total cost of the equipment necessary to do this would certainly not be any more, and would probably be less, than that of the present method of duplicating pieces in order to teach pupils by the group method.

Some cities have some of their ward or elementary school buildings located near each other. Where this is true, it would be possible to secure varied experience in different practical arts for boys by having each one of these buildings devote its attention to arts or lines of employment different from that to which each of the other buildings gave its attention. By shifting the pupil for a portion of his day or year from one building to another, these buildings thru co-operation could secure training in varied activities for the boys.

If the interest and capacity of the boy is to be properly tested, the experience which he receives in the school shop should be made as real as possible. This means that the instructor in charge of the work should have at least some elementary knowledge of the industry dealt with. For the purposes of this pre-vocational training, he need not be a journeyman or master of the calling, but he should have had a sufficient contact with it to be able to bring some of its atmosphere into the schoolroom. There are probably some excellent instructors in manual training for boys in this country today who are women, but the burden of proof rests upon him who proposes a woman as teacher of the practical arts for boys to show she has had such experience and possesses such ability as to render her an exception to the general presumption that the teachers of this work should be men.

The work should be carried on as nearly like the actual shop as possible, otherwise the experience lacks reality. This does not at all mean that in the instruction an attempt should be made to reach shop standards of workmanship. In the earlier days, boys had an opportunity to tinker in an elementary way at different occupations. The work was valuable to

them not because shop standards were reached but because they had an opportunity thru it to find out whether they responded to it. The aim of the work should not be large skill but life-experience. Ideals of workmanship for the boys in the shop are good, and to some extent necessary, but they should not be inculcated thru refined work on a few limited tasks to the point of defeating the larger aim of helping the boy to find himself.

At the best, it will be impossible for the school to make this work in practical arts so real as to present to the child the work as it is carried on in the industry. Every place where the local community has the work which is being done in the school carried on in a shop or factory, arrangements should be made to have the boy visit the establishment and secure an opportunity under favorable conditions to see grown men carrying on the work on a large scale which he is attempting to do as a boy would do it under the school roof. In this way the manufacturing establishments, shops, and farms of the community would be made to co-operate with the school in bringing the boy into contact with the work of the world so that he might choose from it that which he was best adapted to pursue.

Pupils should be taught individually rather than by the group method. The work should be put on a productive rather than on an exercise basis. The shop should make useful things to be utilized by the school or by the school system. Every experience goes to show that boys are much more interested in making things which are to be used in the school system and thru which the boy is conscious of the fact that he is contributing something that is socially useful than they are in making a tabouret for sister's parlor. Somewhere in the course there should be work done by the boy that smacks of the time element and ways of the shop outside. Where pupils make parts of things, all should get an experience both in making parts and of assembling those parts into the finished product.

The experience which the boy undergoes in the shop should be made educative for him. He should do there something more than merely use his hands. On every job which he performs, every opportunity should be used to have him do whatever drawing, arithmetic, spelling, and even composition work will enable him to do the job better and to gain power in the use of related academic work.

Such a program would not be a difficult or complicated one were it not so totally at variance with the present practice of the schools. The large results to be obtained from the work justify its introduction, tho a more flexible administration of both academic and manual-training work in the seventh and eighth years would be necessary. It seems certain that to carry out such a program more time would have to be given for manual training, or training in the practical arts, than at present. This might be secured by the substitution of such work for other required subjects. It would probably best be secured by lengthening the school day. Advocates of the lengthened school day point out that if pupils gave half their time to

actual work with their hands rather than to close attention to books, a longer school day would not only not be burdensome but would be beneficial to them physically as well as otherwise.

It is certain that if we are to accomplish anything worth while in working with the hands with children between twelve and fourteen years of age, we must give more time to the work in the program than the average of fifteen or twenty minutes per day which in most cases is allotted the practical work, and which gives it only the same importance in the course as music and spelling. We need wider experience and training for the instructors. Wood working and metal working have been the only lines of training for which they have been prepared in our schools. They need not only preparation for different lines of work in the schools but a wider and more intimate contact with other lines of industry. In order to attract desirable teachers to the work who will be willing to make such preparation and secure such experience, there should be more salary for the capable. Above all, there needs to be in all quarters a greater recognition of the place and value of training in the practical arts in the elementary schools, both for its educative benefit to the pupils and as an indispensable part of any successful attempt to give proper vocational guidance and direction to the adolescent.

It is not denied that the program set out above raises some problems new in character, doubtless some that are difficult of solution from the administrative standpoint, which cannot be discussed in detail here. I am attempting to set forth some of these in a printed sheet, which has been distributed in this meeting, under the heading:

SOME QUESTIONS FOR SOLUTION

1. Should all children of twelve to fourteen years of age be required to take some training in the practical arts?

2. What difference in amount and kind should be made in the training as between those strongest in book work and those strongest in manual work?

3. Should this training in the practical arts be restricted to those who have reached the seventh grade at twelve years of age, or should all children, even if they are retarded in their work, who need the work be given it?

4. How much experience in an industry or occupation should an instructor have in order to teach it as a part of pre-vocational training in the practical arts?

5. What changes should be made in the preparation of teachers of manual training in the practical arts as now given in order to fit them properly to carry on such training as shall serve effectually as a part of a program of pre-vocational guidance and education?

6. How may teachers of practical arts in the upper grades of the elementary schools secure necessary experience in lines of industry or occupations with which they are expected to deal?

7. What should be the time allotment given to training in the practical arts?

8. What are the kinds or types of jobs or experiences or enterprises from each of the practical arts, such as gardening, metal working, wood working, electrical working, printing, book-binding, cement working, clay working, that the schools should give?

9. To what extent should the school add to the list of practical arts others carried on by the local community?

10. How can the instructors in the practical arts aid in giving proper vocational guidance and direction to pupils?

11. What should the school authorities do with the output of the work in the practical arts?

12. What are the working programs for such training in the practical arts for those of twelve to fourteen which seem best for typical or representative school units in cities and towns of varied and given population?

13. Should the school day be lengthened in order to give the training, or can it be given in the present school day by substituting it for some work now required?

14. If proper time allotment is secured by substitution, in place of what other work should it be offered?

15. To what extent should this school training in the practical arts be supplemented by visits to places in the community where they are being practiced commercially?

16. To what extent should the job or enterprise be used as the means, or center, or core of instruction of the boy in related arithmetic, drawing, English, geography, civics, etc.?

17. What would be the best equipment for a two-year course of training in the practical arts, for a group of twenty boys, in which the jobs or experiences of the pupil were drawn from a number of different occupations or employments?

18. From what practical arts should the experiences be drawn for a course of training as a basis for the vocational guidance of girls; and what would be the best equipment for such a course in meeting the needs of a group of twenty girls?

19. To what extent, by co-operation between different elementary-school buildings each equipped to give work in only one or two practical arts, could pupils be interchanged for a part of the day so as to give them varied experience in activities drawn from a number of different arts?

20. How may we best impress school authorities with the great educative as well as social and economic value of the right kind of work in the practical arts for children twelve to fourteen years of age so that it may cease to be a mere appetizer for academic activities and be given its proper place and opportunity in the work of the school?

DISCUSSION

Frank M. Leavitt, associate professor of industrial education, University of Chicago, Chicago, Ill.—It is obvious that the program suggested by Mr. Prosser cannot be carried out without differentiating educational opportunities, purposes, and methods at a somewhat earlier point in the school system than that which has been commonly accepted as the established point of divergence; that is to say, earlier than the beginning of the so-called high-school period. This fact, that children must decide, or must have decided for them, the question as to which of the several paths shall be taken when they reach, let us say, the beginning of the seventh grade, forms the storm center of argument between those who contend for or against the admission into the elementary school of vocational courses or vocational motives. The opponents of such a procedure maintain that nothing so sordid as the problems of earning a living should be imposed upon the immature children found in this grade. The advocates believe that the earning of a living has become by this time, for many children, a matter of vital and immediate concern and that this vocational motive must be employed to stimulate interest in education in general if we are to retain in the school beyond the compulsory school period a very considerable proportion of our boys and girls.

It is my purpose, in discussing Mr. Prosser's paper, to enlarge a little on this one feature of the plan—the necessity for promoting this differentiation of purpose and method in the upper elementary grades.

Differentiation is necessary because, as we come nearer and nearer to the realization of our dream of universal education, we are forced to substitute, to some extent at least, the popular ideal of education for the philosophical.

The late Professor William James, in speaking of the newer conception of psychology, and its influence on educational thought, long before the specific question which we are now discussing became acute, stated the matter with great clearness:

> An old historic divergence of opinion comes in here. Popular belief has always tended to estimate the worth of a man's mental processes by their effects upon his practical life. But philosophers have usually cherished a different view. "Man's supreme glory," they have said, "is to be a rational being, to know absolute and eternal truth. The uses of his intellect for practical affairs are, therefore, subordinate matters. The theoretic life is his soul's genuine concern." Nothing can be more different in its results on our personal attitude than to take sides with one or the other of these views and emphasize the practical or the theoretical ideal. In the latter case, abstraction from the emotions and passions and withdrawal from the strife of human affairs would be not only pardonable, but praiseworthy, and all that makes for quiet and contemplation should be regarded as conducive to the highest human perfection. In the former the man of contemplation would be treated as only half a human being and passion and practical resource would become once more glories of our race, a concrete victory over this earth's outward powers of darkness would appear an equivalent for any amount of passive spiritual culture, and conduct would remain as the test of every education worthy of the name.

Theoretically the philosophical ideal should enable us to determine what constitutes the best education. This best education would then become the uniform and eventually the universal education. The popular ideal, however, absolutely requires that we seek to establish diversity of educational opportunity corresponding to the diversity of the "practical" needs and capacities of "all the children of all the people."

The demand which is being made for this diversity of educational opportunity is frequently accompanied by severe criticisms of the schools as they are. I am not one who believes that these criticisms are justifiable. I am confident that our schools were never better than today and that it would be difficult indeed to make the best schools more satisfactory than they now are for those children who progress happily from grade to grade, succeeding with all their studies, regular and special—art, literature, science; and stimulated and interested by all their activities, manual, physical, æsthetic, and social. I can hardly imagine how anything could be devised which would develop in such children more ability, resourcefulness, and adaptability, or would enable them to meet more successfully the duties of their vocational lives and their social and civic responsibilities. Truly the schools have afforded these children both efficiency and culture. But for large numbers of our boys and girls who leave school at the earliest possible opportunity, uninterested and ineffective, and indeed for many others whose success in their present school work is only mediocre, a truer, finer philosophy of life might be gained by the practical study of principles and processes which they must certainly apply in an early industrial future than can possibly be given by the study of those more abstract subjects commonly included in the traditional courses of study, the applications of which are, for these children, infinitely remote.

Again, differentiation is becoming necessary because we are taking account of the time element in education. It is becoming more and more clear that an education cannot possibly be given in the few short years between five or six and fourteen. Our problem is not, therefore, to give an education, but to develop that interest and curiosity in education which will later result in sending the children to other sources of information, the libraries, the evening classes, the public lectures, the scientific and trade journals, their friends, their foremen, their employers. The best school cannot give an education, but a school may develop an impelling curiosity and may give pupils some ability to find out how and where that curiosity may be satisfied. It is obvious that with such differences as exist among the children in our public schools—temperamental, financial, and social—we must have a corresponding variety of stimuli to arouse their curiosity or interest.

And finally we must furnish this differentiation in the schools at the time when the diversified interests appear in the children. We must not lose sight of the fact that there are other educational factors besides the schools and that these are offering counter-attraction to the children. Nor should we forget that whereas formerly the education chose the children, today the children are choosing the education. Whereas formerly the school received, tested, and finally selected those who were competent "to get an education," today children are, in a measure, seeking the kind of education which they most desire, be it the commercial trade school run for profit rather than for the pupil, or the alluring "job" which promises advancement, or the public school. It behooves us to bear this fact in mind, for the good of society if for no other reason, and to offer a wide variety of educational opportunities within the school system, and at about twelve years of age, to the end that each child may be kept under the beneficent supervision and guidance of the state thru as many of these precious formative years as is consistent with the present needs and ultimate possibilities of the individual.

John C. Brodhead, assistant director of manual arts, public schools, Boston, Mass.—As regards ability and general vocational interests, there has been greater freedom in courses of the manual arts than in academic subjects, in suiting work to local interests and to individuals. Pupils whose academic averages have caused them to repeat a grade have not been compelled to repeat their handiwork courses, but have gone on as their abilities have warranted. This has been true of girls in their cooking and sewing, as of boys in their shopwork. Moreover, the modern teacher of handicraft is expected to know the local industries and to interpret them to his or her pupils.

In few cities does the hard and fast course now obtain. The backbone may exist, planned to bring out the many sides of the subject, but only as a series of points of departure, many options being offered, all along the line, of problems concerning the home, field, club, or even market. The last half of an eighth-grade course might wisely consist of problems entirely self-selected, subject only to the veto of a wise instructor.

In some communities, the pupils study typical industrial activities, such as transportation, mining, agriculture, etc., and fashion, in miniature, working models of cars, bridges, hoists, plows, and the like. In other places, the activities formerly carried out in wood alone have broadened out until we hear of scattered centers where shoe-repairing, ceramics, book-binding, concrete construction, printing, sheet-metal working, or electrical wiring are given as subjects of manual training.

Occasionally, boys are set to laying floors, running up partitions, and even building substantial structures for themselves or the school, and girls make curtains, draperies, and table linen for such buildings. In one large city, the course will call hereafter for 10 per cent of the pupils' manual training time to be applied toward the production of school equipment, not as a measure of economy, but to give the test of economic value to the work, to illustrate the advantages and disadvantages of the division of labor, to call for co-operative effort, and to enforce lessons of efficient utilization of time and materials.

All the above is manual training, pure and simple, good for all, capable of correlation in any sane curriculum, and, while not specifically vocational, offering fine opportunities for wise vocational advice and guidance.

All over this country, we have prided ourselves on offering a high-school education under strong teachers, in small classes and in fine buildings, complacently feeling that herein we were offering equality of opportunity to all. Lately we have come to see that equality of opportunity does not mean identity of opportunity and we are establishing our technical high schools, our high schools of commerce, and our high schools of practical arts, not to mention trade or industrial schools of the secondary type. This is as it should be, but while we are spending, in completing the education of those who pass thru our high schools, the large sums necessary to carry them thru the three or four years, what are we doing for the still larger number who, for various reasons which I will not

discuss here, complete their formal education at fourteen years of age, and frequently in the fourth, fifth, and sixth grades?

In as conservative a city as Boston, pupils of the sixth grade, whose "ability and vocational interests" prompt them thereto, have been, for generations, admitted to the Latin School, the sole acknowledged function of which has been to prepare its students for college. And Boston has come to feel that, if it is reasonable to carry on such a school with its high-salaried masters, its small classes, and its six-year course for one group, it is only fair to spend any reasonable sum in excess of the present elementary per capita expense in preparing other groups in the upper elementary grades for the vocational fields upon which they feel that they must enter at or soon after the age of fourteen.

And so we have, in Boston, a Girls' Trade School and an Industrial School for Boys, in the establishment and operation of which we have had such valuable assistance from Mr. Prosser. As these schools admit at fourteen years of age, whether or no the pupil has graduated from an elementary school, they are examples of differentiation adapted to the vocational interests of children who are, for all academic purposes, in the upper elementary grades. These schools have a long school day and a long school year and pupils spend about half of the time in the shops on productive work and the rest of the time in studying shop English, shop arithmetic, business forms, hygiene, current events, industrial history, etc. These schools are certainly the solution of the problem of the girl or boy who has been able to reach the seventh or eighth grade, who has an inclination for industrial pursuits and can find it possible to spare one or two more years for education. On the other hand, the overgrown boy hopelessly behind his fellows in the grades, because of a disinclination for the regular curriculum, is inclined to leave school at fourteen years of age and it is rather late for the industrial school to call him, even if it wanted him, which is not in all cases apparent.

At this point Boston presents some prevocational experiments for your consideration. Some of them are four years of age, some are but just started, and I trust that there are many more to come. Each one groups itself around the constructive work of some typical industry, such as machine-shop practice, sheet-metal working, printing, book-binding, furniture- or box-making. A small class (about thirty) is organized from pupils twelve years of age or more, from any grade where they are badly behind their fellows of equal age, provided they have some manual dexterity. They are put under the charge of a warm-hearted, adaptable teacher, preferably a man, and are divided, in the light of scholarship, into two divisions. Each division receives ten hours' instruction weekly in the shop under an instructor who, ordinarily, is a craftsman as well as teacher. The academic work is that outlined above for trade schools, with problems drawn from the shop as much as possible. Only such shop activities are attempted as would naturally lead to the advanced trade school. We hope that, at the end of two years:

1. The pupil will have found the pertinence of ordinary school subjects, can go back into the ordinary grades, and pass on to graduation and the high school; or (more likely)
2. He will have found that his bent lies along industrial lines and will appreciate how much he will ultimately gain by further instruction. Such a pupil will naturally go to the trade school to find his vocation and perfect himself therein; or (if worst comes to worst)
3. The pupil will leave school and enter some industry where there is a possibility of advancement, and with a desire for such advancement. He will, moreover, have a better chance to obtain such employment than if he had not had the definite training in the prevocational center. It has not taught him a trade. He may not have handled the materials, nor employed the processes of his new vocation, but he has been taught economy of material and time, to take and carry out orders, to work with, under, or over others, and to produce a merchantable commodity in some material.

E. G. Cooley, Chicago, Ill.—I wish to dissent from the ideal picture which has been presented to us of the disadvantages of the city boy. It has been assumed that the successful men all come from the country, but facts will not support this assumption. An inves-

tigation of the origin of the great men of Europe revealed that many of the illustrious men of France, Germany, Italy, England, and Scotland have come from the cities, Geneva leading the list and Paris following.

We may profit more largely than we now do from the methods of the kindergarten. The kindergarten turns the active motives of children to account, and similar methods of procedure should be carried up thru the grades. Mr. Prosser has stated that differentiation in handwork should begin at twelve years of age. I believe differentiation should begin farther down than seventh or eighth grade. The handwork of the kindergarten should be modified, and carried on thruout the elementary school. I do not believe in attempting to handle this differentiation in the two upper grades. The elementary school would do well to consider kindergarten methods more carefully, tho much has already been accomplished in this direction. The American elementary school is the best in the world; even Germany admits this. This is largely due to the fact that Froebelian teaching is observed here more fully than there. Germany's secondary schools are better.

We agree that vocational training is needed. Scotland deals with the question effectively. The interested people in the towns make investigations and report conditions. They need not make difficult experiments to discover needed differentiations.

The child should have a chance to use his hands, and he should begin early. Some lines of effective manual-training work have been based upon reform-school methods. The Rochester Reform School makes articles for use in the school system. This can be done effectively, but it is not the solution of the question for the normal child. These boys of the reform school have been crowded out of the school system; they are presumably the inferior people. Education has assumed that vocational work shall be provided for the inferior; that incapacity in academic work shall be the excuse for vocational education. This is a serious error. Brainy fellows are needed in trades. Men who start as apprentices in trades take positions of leadership more frequently than university graduates. Education should not select the dullard for blacksmithing and carpentering. It establishes undesirable class distinctions. The white-shirt brigade is no brainier than the overall brigade. Academic positions are not higher. Separation into inferior and superior work should not be made between different occupations, nor between the opportunities of men and women.

John C. Brodhead, Boston, Mass.—Let us begin the solution of the problem where it pinches most. Take the children who are falling below grade in academic attainment because society has forced upon the school certain standards of attainment. We must first elevate public opinion. At present we must meet the greatest need, which is opportunity of development for the child who is academically retarded.

E. G. Cooley, Chicago, Ill.—We should use the school arts as foundation for vocational work. Give the children who are taking vocational training special courses in English, science, and other academic subjects, with the point of attack in each changed to re-enforce the manual activities.

Charles A. McMurray, director of Normal Training School, De Kalb, Ill.—It has been said that industrial work stands on a par with academic work. This depends on whether the industrial work has sufficient thought-content to warrant it. In all other studies there is a body of organized thought-content. Is there a progressive thought-development in the course of study in the industrial arts from the kindergarten up? If the subject-matter here has equal worth for the world, it must be because it has fundamental thought-content. Can we lay out a progressive series of problems from simple to complex, requiring growth in mental power and manual skill? The child

must design its own constructions and solve its own problems. Manual training is essentially a thought-process and forces the worker back to correct thinking.

If a child is called upon to design an object, he thus combines in his thinking all the elements of a complete problem. This precedes the detailed process of working out the complete product. Thought thus precedes and accompanies skill in execution. In turn it is corrected and influenced by the nature of the tools and materials used. The industrial arts have a rich body of thought which may be organized into a connected series of problems.

FRANK M. LEAVITT, Chicago, Ill.—Efficiency of education must be measured by the degree of resourcefulness and adaptability which it develops in children. The large percentage of children who are failing in our public schools indicates not inferiority necessarily but inability to handle the kind of problems which the school has put up to them.

C. A. PROSSER, New York, N.Y.—The training in manual arts in Boston is real in that all objects made are used in the school system. But I regret that the boys spend the major part of their time in one kind of work. We need to set up a series of shops doing different kinds of work. We need the co-operation of principals of the schools with men who are doing industrial work. It is a difficult problem and must be worked out slowly by more doing and less talking. Try out things with small groups and then widen out into bigger groups. Like the old Negro who continued to fish in the mudhole tho he knew there were no fish in it, we have been doing things because they were near.

I agree with Mr. Cooley that it would be a fine thing to provide pre-vocational training thruout all the grades of the elementary schools, but at present the school arts and industries are unsuccessful and offer one of the greatest problems which we have. The course in industrial arts needs to be reconstructed from the foundation up. At present many children have to choose a vocation at fourteen years of age after the upper grades have neglected to offer them any sort of vocational opportunity or guidance. This great army needs testing out in the schools and we must meet the problem in some way.

E. G. COOLEY, Chicago, Ill.—This problem can be handled in the eight years of the elementary course, better than in the last two years, and by so doing provide a training in motor activity all the way thru.

C. A. PROSSER.—Replying to Mr. McMurray, who asks that industrial training prove its educational value, I would say that there should be no divorce between manipulative and academic work. The weakness of the position of manual training has been the aloofness of other studies which have denied to manual training the opportunity to justify itself by co-operation with academic studies.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—John Calvin Hanna, principal, Township High School.....Oak Park, Ill.
Vice-President—Edward L. Brown, principal, North Side High School.....Denver, Colo.
Secretary—Clarence D. Kingsley, Manual Training High School.....Brooklyn, N.Y.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The meeting was called to order in the Banquet Room of the Auditorium Hotel, Chicago, Ill., by President John C. Hanna.

"The Report of the Committee on the Articulation of High School and College" was presented by the chairman, Clarence D. Kingsley, of the Manual Training High School, Brooklyn, N.Y., and was adopted by the department.

The president appointed the following Committee on Nominations:

H. E. Brown, principal, New Trier Township High School, Kenilworth, Ill.
J. B. Ragan, principal, Industrial Arts High School, Sterling, Colo.
D. W. Springer, principal, High School, Ann Arbor, Mich.

John C. Hanna delivered the president's address, on "Unrest and Wreckage."

Lotus D. Coffman, supervisor of Training School, Eastern Illinois State Normal School, Charleston, Ill., presented the following paper: "The Relation between Supply and Demand for High-School Teachers."

The meeting then adjourned.

Clarence D. Kingsley, *Secretary*

SECOND SESSION—Wednesday Forenoon, July 10, 1912

The members of the department met in round table conferences at 2:30 P.M. as follows:

A. English—Chairman, James F. Hosic, head of the Department of English, Chicago Teachers College, Chicago, Ill.

The English Round Table Conference was called to order in the Banquet Room of the Auditorium Hotel.

Copies of the *English Journal*, containing the "Report of the Committee on College-Entrance Requirements in English," under the topic, "The Influence of the Uniform Entrance Requirements in English: A Report of Progress," were distributed, and J. F. Hosic, as chairman of the committee, added a brief statement as to additional information gathered in New England, Philadelphia, and elsewhere. He reported that, in accordance with a resolution adopted by the Round Table at San Francisco in 1911, the committee had organized a society called the National Council of Teachers of English, the first meeting of which was held in Chicago, December 1–2, 1911.

The report of the committee was approved, and a motion passed to the effect that the committee be continued with instructions to co-operate with all other national committees concerned with the high-school course in English. The intention of this motion was to open the way for the preparation of a national syllabus of secondary English. At the request of Elmer W. Smith, of Colgate University, Hamilton, N.Y., the committee

was further instructed to make provision for oral English as a definite and important part of its work.

It having been reported that the Board of Directors of the National Education Association had approved the action of the Round Table in changing its name to English Section, a motion was passed for the appointment of a nominating committee, which was appointed by the chair as follows:

Walter J. Hunting, superintendent of schools, Carson City, Nev.
Mrs. Henry Hulst, Central High School, Grand Rapids, Mich.
Elmer W. Smith, Colgate University, Hamilton, N.Y.

This committee offered the following report:

For *President*—James Fleming Hosic, Chicago Teachers College, Chicago, Ill.
For *Secretary*—Vincil C. Coulter, head of the English Department, State Normal School, Warrensburg, Mo.

The report of the committee was adopted.

General Topic: "Ways and Means of Increasing the Effectiveness of Instruction in English Composition."

Under this topic, the following papers were presented:

A. "Vocational and Moral Guidance thru English Composition in the High School," by Jesse B. Davis, principal of the Central High School, Grand Rapids, Mich.

B. "Oral Themes," by Eleanor Sheldon, instructor in English, State Normal School, Oshkosh, Wis., and Mary E. Courtenay, teacher of English and oral expression, Englewood High School, Chicago, Ill.

The meeting then adjourned.

VINCIL C. COULTER, *Secretary pro tempore*

B. ANCIENT LANGUAGES—Chairman, Wilfred F. Beardsley, principal of Evanston Township High School, Evanston, Ill.

The Round Table of Ancient Languages was called to order by the chairman at 2:30 P.M.

The following papers were presented:

A. "Some Facts Concerning Classical Training," by John Adams Scott, professor of Greek language and literature, Northwestern University, Evanston, Ill.

B. "A Plan to Reduce Failures in Latin" by Arthur S. Chenoweth, Oak Park and River Forest Township High School, Oak Park, Ill.

The meeting then adjourned.

WILFRED F. BEARDSLEY, *Chairman*

C. MODERN LANGUAGES—Chairman, Charles M. Purin, University of Wisconsin, Madison, Wis.

The meeting of the Conference in Modern Foreign Languages was called to order at 2:30 P.M., by the chairman, in the South Room of the Auditorium Hotel.

The speakers were introduced by the chairman, Charles M. Purin, who gave a brief survey of the Modern Language Round Table Conference in connection with the National Education Association.

The following papers were presented:

A. "Methods of Teaching German and the Personality of the Teacher," by Amalie Nix, president of the German Pedagogical Society of Minnesota.

Discussion: Eda D. Ohrenstein, Hyde Park High School, Chicago, Ill.

B. "The Place of Phonetics in High-School German," by Eduard Prokosch, University of Wisconsin, Madison, Wis.

Discussion: Leonard Bloomfield, University of Illinois, Urbana, Ill.; Louise Fortier, New Orleans, La.; J. N. Lenker, Minneapolis, Minn.

The meeting then adjourned.

CHARLES M. PURIN, *Chairman*

D. MATHEMATICS—Chairman, Charles M. Austin, Central High School, Minneapolis, Minn.

The Mathematics Round Table Conference was called to order at 2:30 P.M. by the chairman, in the Banquet Room of the Auditorium Hotel.

The business of the meeting was the presentation of the "Final Report of the National Committee of Fifteen on Geometry Syllabus," by Earle R. Hedrick, professor of mathematics, University of Missouri, Columbia, Mo., who was chairman of the subcommittee having in charge the syllabus proper. The general chairman, H. E. Slaught, professor in the University of Chicago, Chicago, Ill., who was supposed to be in Europe, was able to be present and join in the discussion, which was led by Henry W. Stager, Fresno Junior College, Fresno, Cal. This report is printed as a separate pamphlet.

R. H. Jordan, of Minneapolis, Minn., then presented a paper on "The Relation of the Suggested Geometry Course to the Manual-Training Course in High School."

The following resolution was unanimously adopted:

Resolved, That the report of the Committee of Fifteen on a Syllabus in Geometry be accepted with thanks, that its adoption as a basis for the teaching of geometry in the United States be recommended, and that the Committee on Investigations and Appropriations of the National Education Association be asked to contribute toward the expense of further circulation of the report.

The meeting then adjourned.

CHARLES M. AUSTIN, *Chairman*

E. SCIENCE—Chairman, Joseph L. Thalman, head of the Department of Biology, Oak Park and River Forest Township High School, Oak Park, Ill.

The Science Round Table Conference was called to order by the chairman at 2:30 P.M., in the Francis I Room of the Congress Hotel.

The following papers were presented:

A. "The High-School Course in General Science," by V. G. Barnes, high school, Madison, Wis.

Discussion: Ada L. Weckel, Oak Park and River Forest Township High School, Oak Park, Ill.

B. "Method in the General Science Course," by John G. Coulter, Bloomington, Ill.

Discussion: Charles E. Peat, Lewis Institute, Chicago, Ill.

It was moved and carried that the Conference extend its thanks to J. C. Hanna, president of the section, for the establishment of the Conference, and suggest to him that the Conference be made a permanent part of future programs.

The meeting then adjourned.

E. D. HUNTINGTON, *Secretary*

THIRD SESSION—THURSDAY FORENOON, JULY 11, 1912

The Round Table Conference of the Special Joint Session of the Departments of Higher Education, Normal Schools, and Secondary Education was called to order in the Auditorium Theater at 9:30 A.M. by the chairman, John Calvin Hanna, principal of Township High School, Oak Park, Ill.

General Topic: "The Significance of Recent Investigations in the Field of English."

Under this topic, the following papers were presented:

A. "The Labor and Cost of Composition Teaching":

"The Present Conditions," by Edwin M. Hopkins, professor of rhetoric and English, University of Kansas, Lawrence, Kans.

"Methods of Amelioration," by John M. Clapp, professor of English, Lake Forest College, Lake Forest, Ill.; Harry G. Paul, assistant professor of English, University of Illinois, Urbana, Ill.

B. "Desirable Equipment for English Work," by Vincil C. Coulter, head of the English Department, State Normal School, Warrensburg, Mo.

C. "Progress in Articulating School and College English," by James F. Hosic, head of the Department of English, Chicago Teachers College, Chicago, Ill.

D. "Progress in Standardizing the Measurement of Composition," by Ernest C. Noyes, teacher of English, Fifth Avenue High School, Pittsburgh, Pa.

A motion was carried to indorse the report presented by Professor Edwin M. Hopkins, and request the proper officials of the National Education Association to give it the indorsement of the general body.

V. C. COULTER, *Secretary pro tempore*

FOURTH SESSION—FRIDAY AFTERNOON, JULY 12, 1912

The department was called to order by the president, John C. Hanna, principal of Township High School, Oak Park, Ill.

H. E. Brown, chairman of the nominating committee, reported the following nominations:

For *President*—M. H. Stuart, principal, Manual Training High School, Indianapolis, Ind.

For *Vice-President*—I. M. Allen, principal of high school, Wichita, Kans.

For *Secretary*—William C. Hill, principal, Central High School, Springfield, Mass.

The report of the Committee on Nominations was received and the officers were unanimously elected.

On motion of James F. Hosic, of Chicago, the committee of the English Section on College-Entrance Requirements in English was recognized as a committee of the Secondary Department and authorized to co-operate with other existing national organizations concerned with high-school English.

On motion of Herbert E. Slaught, of Chicago, the following resolution adopted by the Mathematics Round Table was indorsed by the Secondary Department:

Resolved, That the report of the Committee of Fifteen on a Syllabus in Geometry be accepted with thanks, that its adoption as a basis for the teaching of geometry in the United States be recommended, and that the Committee on Investigation and Appropriations of the National Education Association be asked to contribute toward the expense of further circulation of the report.

On motion of Clarence D. Kingsley, of Brooklyn, the President of the National Education Association was requested to appoint the members of the twelve subcommittees to work with the Committee on the Articulation of High School and College.

The following papers were then presented:

"The Professional Training of High-School Teachers," by W. C. Bagley, professor of education, University of Illinois, Urbana, Ill.

"The Influence of Prolonged and Carefully Directed Work," by Otis W. Caldwell, School of Education, University of Chicago, Chicago, Ill.

Spencer R. Smith, principal of Wendell Phillips High School, Chicago, Ill., and chairman of the committee, presented the "Report of Committee on Cosmopolitan High-School Curriculum." The report was adopted.

The president then introduced M. H. Stuart, the incoming president of the department, who invited suggestions from the members of the department for the purpose of increasing the usefulness of the department, and urged the co-operation of the high-school teachers in supplying material for the subcommittees of the Committee on the Articulation of High School and College, which are to work on the various high-school subjects during the ensuing year.

The meeting then adjourned.

CLARENCE D. KINGSLEY, *Secretary*

PAPERS AND DISCUSSIONS

THE REPORT OF THE COMMITTEE ON THE ARTICULATION OF HIGH SCHOOL AND COLLEGE

CLARENCE D. KINGSLEY, TEACHER OF MATHEMATICS, MANUAL TRAINING HIGH SCHOOL, BROOKLYN, N.Y., CHAIRMAN

Two years ago this department adopted resolutions requesting colleges to discontinue the entrance requirement of the second foreign language and to recognize as electives all subjects well taught in the high school. During the following year this Committee on the Articulation of High School and College was appointed and in July, 1911, submitted a report containing:

A. Some preliminary considerations on the field and function of education in the high school.

B. A working definition of a well-planned high-school course.

C. Reasons for the adoption of this definition as the basis of college admission.

The report contained also a supplementary report recommending that high-school work in both foreign language and mathematics be no longer regarded an indispensable prerequisite to a college education.

This report, including the supplementary report, was adopted by the Secondary Department. The National Education Association appropriated $300 for the continuation of the work of the committee. That sum has been spent in printing and distributing nearly 30,000 copies of the report. The committee wishes to acknowledge the assistance of the state superintendents of public instruction in thirty states, Porto Rico, Alaska, and the Philippines, over a hundred college presidents, and many school officers in the labor of distributing these copies. The report has been discussed by many high-school and college faculties and educational associations; it has been formally indorsed by various associations; enacted with practically no modifications by the State Board of Indiana as defining an approved high-school course; and is receiving favorable consideration by college authorities.

The chairman of the committee has devoted three months this spring to the preparation of a bulletin to contain a tabulation and analysis of the entrance requirements of about 250 leading colleges and universities. The Bureau of Education has furnished clerical and other assistance and will publish and distribute the bulletin when prepared.

Recent events indicate a marked tendency toward the hearty recognition by the colleges of the broader function of the high school, a willingness to articulate with the high school thus broadened, and a desire to learn the actual needs of high-school students in order to supply teachers who are better equipped to meet those needs.

The willingness of the college to articulate with the broader high

school places immediately increased responsibility upon high-school teachers, principals, and superintendents for the wise selection and organization of curricula, subject-matter, and methods of instruction. Many workers are now engaged in enriching, re-examining, and reorganizing the materials in each subject. But our progress will be slow and wasteful unless we now adopt a simple and effective method for making the results gained by these workers generally available. To accomplish this purpose your Committee on the Articulation of High School and College herewith submits the following recommendations:

1. That for each of the following subjects a subcommittee be organized:

(1) English
(2) Mathematics
(3) Ancient language
(4) Modern language
(5) Social science
(6) Natural science
(7) Mechanic arts
(8) Home economics
(9) Agriculture
(10) Business
(11) Music
(12) Pedagogy and psychology

2. That a round table be organized in each of the subjects where such round table does not exist, and that the subcommittees be appointed.

3. That each committee collect from a limited number of well-organized, large and small high schools in the various parts of the United States material on its own subject under the general headings:

Survey of work now conducted.

Recommendations for modification.

Suggestions for experiments.

A suggested outline for this material is given below.

4. That each subcommittee critically review the material, prepare an abstract thereof, and draw up recommendations for such modifications as seem wise, and such experiments as seem desirable, together with a statement of the conditions under which the experiments could have fair and reasonable trial.

5. That the Bureau of Education be requested to publish and to distribute the reports of the various subcommittees.

6. That the National Education Association be requested to appropriate the sum of $1,200 for the work of the Committee on the Articulation of High School and College and of the twelve subcommittees, including the expense connected with the necessary meeting or meetings.

Suggested Outline for Material

I. survey of work now conducted

1. Name of Subject
2. Name of High School
3. Place in the Curriculum: In what year or years of the high school is this subject studied? Why?
   How much time is devoted to it?
   Is it elective, or prescribed for all? Why?
4. Content: Does your work resemble that in any well-known syllabus? If so, what modifications are you making? And if not, give definite outline of your subject.
5. Purpose: To which of the following ends does the subject make substantial contribution?
   a) Development of specific efficiency: civic, vocational, domestic.
   b) Development of general efficiency; that is, intellectual power.
   c) Development of ideals: civic, vocational, domestic, personal character.
   d) Development of appreciation: æsthetic, literary, scientific, social.

Indicate how the dominant purpose or purposes of the subject modify and control the methods of instruction.

6. FOR WHOM VALUABLE: Entirely irrespective of college-entrance requirements and credits, of what value is this course to a student who is likely to go to a college of liberal arts? to a college of engineering? to a college of agriculture? Of what value to a student who is undecided as to his vocation or continued education? to a student who is not going to a higher institution?
   For what group or groups of students is it particularly valuable?
7. METHODS: Is the subject taught by the recitation method, classroom discussions, laboratory method, or a combination of methods? Describe any important feature in the methods employed.
8. EQUIPMENT: What would be the approximate minimum cost of equipment reasonably adequate for teaching the subject to a class of thirty pupils? of fifteen pupils? Have you a larger equipment than this in your school?
9. EXAMINATIONS: To what extent do you use written examinations as an aid to instruction? to what extent as a means of testing the right of the student to promotion? What comment have you to make upon the value of examinations for each of these two purposes?

II. RECOMMENDATIONS FOR MODIFICATIONS

Under this heading give any modifications that you would recommend. Indicate whether your recommendations are based upon an individual opinion or upon the opinion of a substantial number of other teachers of your subject. Do present college-entrance requirements stand in the way of such modifications? Mention any other obstacles to the changes recommended.

QUANTITY: Please state explicitly whether the results in this subject conducted under your present time allotment would be improved if the number of topics or the quantity of work attempted under certain topics were materially reduced.

III. SUGGESTIONS FOR EXPERIMENTS

Under this heading suggest any experiments that you think should be tried. Mention any special conditions that would be necessary to make a fair trial of the experiments and cite any instances in which similar experiments have been tried, indicating results obtained.

Respectfully submitted,

Committee

CLARENCE D. KINGSLEY, *chairman*, Manual Training High School, Brooklyn, N.Y. (Now agent, State Board of Education, Massachusetts.)
WILLIAM M. BUTLER, principal, Yeatman High School, St. Louis, Mo.
FRANK B. DYER, superintendent of schools, Cincinnati, Ohio. (Now Boston, Mass.)
CHARLES W. EVANS, high school, East Orange, N.J.
CHARLES H. JUDD, head of Department of Education, University of Chicago, Chicago, Ill.
ALEXIS F. LANGE, head of Department of Education, University of California, Berkeley, Cal.
W. D. LEWIS, principal, William Penn High School, Philadelphia, Pa.
WILLIAM ORR, deputy state commissioner of education, Boston, Mass.
WILLIAM H. SMILEY, principal, East Side High School, Denver, Colo.

SUPPLEMENTARY STATEMENT BY THE CHAIRMAN OF THE COMMITTEE

It seems appropriate at this time to give a somewhat fuller account of the progress that has been made during the past year. I shall commence by quoting some statements of opinion regarding the report of last year.

E. W. Butterfield, secretary, Educational Council of New Hampshire, writes:

The more I consider the report of your committee, the better I am pleased with it. I think you have the right plan and the one that must ultimately be accepted.

Theodore Townsend, secretary, Delaware State Board of Education, writes:

The report is working along lines which must prevail in our schools, if public-school education is to be of its highest value to the pupils attending them.

Professor H. V. Neal, Knox College, Indiana:

Nothing that I have read in a long while has given me the satisfaction that has come with the reading of this report, which embodies so completely the mature thought of school men upon this important question.

James Scherer, president, Throop Polytechnic Institute, Pasadena, Cal.:

I have read it with great care and regard it as the best treatment of its subject that I have ever seen.

Brainard Hooker, county superintendent of schools, Indiana:

My high-school teachers in meeting Saturday unanimously favored your report and wish that it may come into use in high-school course and college-admission requirements. We shall make an effort in Indiana to have the committee's report worked out in high school and in college.

David Snedden, commissioner of education in Massachusetts, in transmitting the report to the high schools and colleges in Massachusetts, wrote:

In distributing this report, I wish to express my conviction that it marks a distinct step in advance in the solution of the problem with which it deals. The committee offers a positive program. It has taken due account of conditions as they exist, both in colleges and in secondary schools.

Nathan Schaefer, state superintendent in Pennsylvania, sent immediately for a thousand copies, but would have preferred to have much greater latitude for the high school. He wrote to the committee:

Professor Judd's comment strikes me very favorably. The report of the committee will do good altho I think it is tinged with the same narrowness which afflicts present college-entrance requirements. I would admit any student to college who is mature enough to grasp what the college has to offer.

State Superintendent J. W. Crabtree, of Nebraska, wrote:

I expect to send with the report a letter calling attention to important features of the report and advising our colleges to put its principles into operation at once.

In Minnesota the transition from high school to college has been worked out perhaps as well as in any state in the Union, and State Superintendent C. G. Schulz writes regarding the report:

This is one of the most carefully thought-out reports that has at any time been made before the [National Education] Association. It states the high-school situation exactly as our school men in Minnesota desire to have it arranged. The relationship proposed between the college and the secondary schools is practical and sensible.

Many college professors and college presidents for years have expressed themselves strongly in favor of more flexible entrance requirements. President David Starr Jordan, of Leland Stanford University, bears unequivocal testimony to the wisdom of permitting the largest possible latitude to the high schools and believes there is no excuse for any other practice. President M. L. Burton, of Smith College, Mass., in his first report, issued within the last year, comes out strongly in favor of a new order. He says:

The highway between the secondary school and the college, instead of becoming inviting and appealing, has become impassable and repelling. The high school is the natural feeder of the college. To block the way between these two constituent units of our educational system is nothing short of suicidal. The desire of the high-school educator,

therefore, for a more intimate co-ordination of the courses and a more generous recognition from the colleges is perfectly justified.

Professor A. P. Brigham, of Colgate University, New York, writes:

I find myself in deep and hearty sympathy thruout with the proposals of the committee and the arguments by which they are supported.

The report has been indorsed by various teachers' associations among which may be mentioned the following:

Maine State Teachers Association.
Michigan State Teachers Association.
New Jersey High-School Teachers Association.
High-School Teachers Section and County Commissioners Section of the Indiana State Teachers Association.

In Connecticut the Classical and High-School Teachers Association this year worked out independently a program tending strongly in the direction of this report. Their program has been submitted to the Connecticut colleges, Yale, Trinity, and Wesleyan, and the attitude of the colleges in that conservative state is most encouraging.

In the High-School Teachers Association of New York City a Committee on Conference with the Colleges, composed of three principals and three teachers, unanimously indorsed the report except that one of the principals maintains that no student should be admitted to a college of liberal arts unless he offers both mathematics and foreign language.

Of immediate significance is the action that has been taken during the past year putting the report into effect both in school curriculum and in college-entrance requirements.

The State Board of Education in Indiana, April 23, 1912, adopted new requirements for approved high-school courses based upon this report. In its circular letter the board states:

The course of study in commissioned high schools has not been sufficiently elastic to admit of the introduction of various practical educational subjects with which the modern school boy and girl should be familiar. The modification of the present course of study follows the report outlined by the National Education Association Committee on Articulation of High School and College and gives a wider range for the high-school course of study.

While these new rules are not binding on the public or private colleges in Indiana, it should be noted that the University of Indiana and several colleges, including DePauw, Earlham, Franklin, Hanover, and Wabash, now grant four or five units' credit for any subjects counted by an approved school toward its own graduation.

The state board of education in Kansas gives its official approval to nearly all of the main propositions of the report and proposes in the new course of study now being prepared to prescribe not more than three units of English, two of mathematics, one of science, and one of history, and recommends but does not propose to require two units of foreign language. Four units, or six when foreign language is not taken, are to be left free for individual and community needs.

State Superintendent Alderman, of Oregon, writes that they intend to revise the high-school course and to follow the report adopted by the Secondary Department of the National Education Association.

State Superintendent Dewey, of Washington, distributed the report and sent a questionnaire to each high-school teacher in the state with a view to adopting the report. Principal Hart, of Spokane, writes that a cursory glance at the replies received from the questionnaire suggests that the vote will be largely in favor of the report.

In addition to the states just mentioned, several other western states had already secured a large degree of flexibility in high-school courses and college-entrance requirements. In the East, Maryland has for two years had a law whereby all colleges receiving

state aid must admit, without examination and without condition, all graduates from approved high schools having four-year courses. The course in Maryland is now being revised following, I am informed, rather closely the recommendations of this department.

The state boards of education in many of the states will apparently hereafter exercise greater control over the high-school curriculum. The University of Maine has of its own accord withdrawn from the New England College-Entrance Certificate Board and will hereafter accept the certification of schools made by the state board.

In the meantime what have the colleges been doing? Harvard and Chicago adopted their new plans a little over a year ago and those plans have been discussed in this department. During this last year many colleges have increased the flexibility of their requirements.

The discussion at the University of Michigan has been keen, finally resulting in the adoption last month of a flexible plan whereby graduates from the best schools will be admitted upon the presentation of an unqualified recommendation covering any twelve units from the list of academic subjects and any three additional units counted by the high school toward its own graduation. It seems to me that the chief difficulty in the plan of the University of Michigan lies in articulating with strong commercial courses. Unfortunately, economics, commercial geography, and commercial and economic history are not included in the list of academic subjects and consequently the commercial student may receive credit for only three units of commercial work.

The University of Minnesota has avoided this difficulty by including a number of commercial subjects under "history and social sciences," thus ranking them as academic subjects. The subjects thus recognized are as follows:

Elementary economics, one-half unit.
Commercial geography, one-half or one unit.
History of commerce, one-half or one unit.
Economic history of England, one-half unit.
Economic history of the United States, one-half unit.

In addition to these subjects four units may be offered for vocational subjects, including therein the following commercial subjects:

Business law, one-half unit.
Business arithmetic, one-half unit.
Elementary bookkeeping, one unit.
Advanced bookkeeping, one unit.
Stenography and typewriting, two units.

Consequently seven and one-half units of credit, or exactly one-half of the entire preparation for college, may be obtained in commercial subjects for entrance to the University of Minnesota.

Reed College, a new college opened last fall on the Pacific Coast, untrammeled by tradition, announces that it had previously arrived at the principles enunciated by our committee and quotes a large part of the report in the catalog. It also states:

No prescriptions whatever are made concerning the subjects to be offered for admission. . . . . Altho there is no evidence to prove that a so-called college-preparatory course is the only one that qualifies a student for college work, there is abundant evidence of close correlation between good work in school and good work in college.

As indicating the consistency of this liberal policy with extremely high standards, it is worthy of note that Reed College admits no conditioned students and no special students, and furthermore that of 263 applicants for the first class, all but fifty were rejected.

Princeton has reduced the amount of foreign language required but has devised a special system in order to discriminate against history in the high school. One year of history counts one-half as much as one year of other electives.

Alfred University has an interesting plan inasmuch as it combines the prescription of

four-fifths of the fifteen units, varying with the course to be pursued, with absolute freedom for the other three units. This method of leaving three units entirely free greatly increases the ease of articulation, while the prescription of twelve units insures a high degree of uniformity in Freshman work.

The bulletin now being prepared under the Bureau of Education will give in tabular form the subjects prescribed and the subjects accepted for college admission by about two hundred of the stronger colleges of liberal arts, eighty-one colleges of engineering, and thirty-one colleges of agriculture. No institutions requiring less than fourteen units are included. This bulletin is intended to show the present status of entrance requirements and, if revised from year to year, will take the place of long rows of college catalogs and will dispel serious confusion in interpreting catalog statements. An examination of the requirements of 203 colleges of liberal arts shows the following facts:

1. Twenty-eight institutions have already recognized the principle that part or all of the high-school course may properly be left entirely free for approved schools to use as they see fit. Leland Stanford, Clark, Reed, Hamlin, Macalester, and Ohio University will accept any fifteen units of good work from an approved school. Eighteen institutions, including the above, grant credit for as high as four units for any good work that an approved school counts toward its own graduation.

2. Over two-thirds of these 203 institutions give some credit for one or more vocational subjects—drawing, shopwork, household economics, agriculture, or business. About half of them give two or more units and one-fifth of them give four or more units of credit for such work. The wide variation as to the particular subjects that will be accepted suggests vague and contradicting opinions by college faculties regarding the relative educational value of these subjects. Thus, some institutions credit shopwork and business but not agriculture, some credit agriculture and business but not shopwork, while others credit shopwork and agriculture but not business.

3. The change in the amount of foreign language required is striking. Sixteen years ago a study of the requirements of 432 colleges showed that nearly three-fourths of them required both Latin and Greek for admission to the A.B. course. Today an examination of the requirements of 203 of the best colleges shows that only about one-fifteenth of them require both Latin and Greek for admission to the A.B. course.

Moreover, a student who can offer no Greek or modern language and only three years of Latin can meet the foreign language requirement of 105 of the 203 high-grade colleges of liberal arts and may become a candidate for the A.B. degree in 82 of these colleges.

Similarly a student who can offer no Latin and only three units of German can meet the foreign language requirement of 110 colleges of liberal arts and may become a candidate for the A.B. degree in 73 of these colleges.

Three years of French will admit him to 105 colleges, three years of Spanish will admit him to 68 colleges, two years of Latin will admit him to 77 colleges, two years of German to 85 colleges, and two years of Spanish to 56 colleges.

Finally, there are 22 colleges of liberal arts to which a student may be admitted without any language other than English and he may become a candidate for the A.B. degree in 18 of these colleges.

In conclusion, the colleges are rapidly placing the responsibility for the selection of subjects and the methods of instruction upon the high school. Therefore, it devolves upon the high school as never before to rise to meet a magnificent opportunity.

UNREST AND WRECKAGE

JOHN CALVIN HANNA, PRINCIPAL OF OAK PARK AND RIVER FOREST TOWNSHIP HIGH SCHOOL, OAK PARK, ILL.

The most striking characteristic of the present period in the world's development is unrest.

There is not only progress and decay; not only the strife between the radical and the reactionary; not only changing of times in the midst of

which we ourselves are changing. These conditions are manifest in every period of history and they cannot surprise us nor disturb our attitude and purpose.

But there is a general spirit of unrest. It is manifest not only in regard to religious creed, but in regard to moral code. It is manifest not only in regard to questions of the form of government, but the whole structure of government is called into question—not monarchy or democracy is the question, but anarchy is seriously studied.

Every fundamental thing is questioned. Nothing is accepted as settled, from the constitution of matter to the individuality of spirit; from the stability of property rights to the essence of sin.

These questionings, moreover, are not merely speculative, they are taking a practical turn. Men seemingly are to fly thru the air, annihilate space and time, convey messages without a medium, manufacture any substance from any other substance, obliterate the lines of demarkation between the chemical elements, see thru solid bodies, tremble at no obstacle of cost or weight or toil, rend continents, finance wars or panics, create life from dead matter, change soul traits by surgical operations, obliterate personality, seize immortality, and defy heaven itself.

The story is told of a blasé New Yorker who, after being shown the lions of Chicago, manifested his lack of enthusiasm by a politely concealed yawn and when remonstrated with defended himself by saying, "Oh well, anyone who lives in New York is not easily surprised." We may paraphrase this and say, "Anyone who reads the papers and magazines becomes incapable of surprise."

The giant under the volcano is turning himself over. Restlessness belongs to the times. This is true everywhere from the Alaskan gold fields to the Chinese republic, but it is conspicuously so in America. Not only are all the general causes that bring about the world's restlessness in full and vivid operation here in our own land but there are some facts that have operated here in peculiar fashion.

Here is the great experiment of self-government, keenly watched by the whole world.

Here is freedom of thought and action and movement. Here is intermigration unrestrained, more general between the mighty kingdoms three thousand miles apart that we call the United States, than between the petty townships that the ancient Greeks called the states of Hellas.

Here are resources in such abundance and variety as the world cannot match. Here is opportunity—not only knocking at every man's door, but dragging him out thru the window. Tradition is nil; change is expected; novelty is welcome; experimentation is the breath of life; sensationalism hardly tickles longer our palates.

There is one phase of this unrest and one way in which the causes for it operate to which my attention has never been called until recently.

The overturning of settled things which began with the Renaissance and was made vital by the Protestant Reformation, which found voice in the Puritan movement in England and culminated in the acts of 1688, which a century later burst forth in the war of American independence, and flamed in the French Revolution—this immense change in men and institutions, as we all know, took diverse forms in various places. One illustration is sufficient: compare England's revolution of 1688 and France's revolution of 1789.

Many times we have been told that our country is in less danger of disaster because of the careful, considerate habit of mind in the Anglo-Saxon race from which we are sprung. The Germanic stock moves slowly and surely where other races sputter and parade and explode. And there is truth in all this. Great changes have come about in England since the days of Henry VIII—probably as great as any that have come about in France, but the upheavals and overthrows and volcanic disturbances in the latter country have had no parallel in England. We, of that ancient stock, are progressive and free to advance, but we must make haste slowly, and thus avoid blunders—our sense of proportion, our sense of loyalty to what is well established, our sense of fair play and acceptance of the results of an honest decision, our sense of humor, all these things save us Americans of the good old Anglo-Saxon stock from going off half-cocked as do those of other stock. This is the commonly received view and it has much of truth in it, but let us examine closely into the facts.

It is worth while to observe that "we Americans" does not mean what it did in 1862—fifty years ago. The stock is modified. Not only is there a large and important infusion of people from south European and central European and other stocks, but—and here is the new thought—it is, in my judgment, undoubtedly true that we ourselves whose ancestors all came from England, Ireland, Scotland, Wales, Holland, Germany, or Scandinavia—that we, the original native Americans, as distinguished from foreigners, as we choose to call them, have been influenced by contact with these outsiders, these Chinks and Hunks and Ginnies and Dagoes, as we contemptuously name them, so that our attitude toward the settled things is largely different from what it was two generations—nay, one generation ago. We, even as they, are beginning to pronounce "liberty" as if it were spelled with a final *e*. Our conception of progress is a little nearer the speed limit, our notion of freedom is a little more hysterical, our conception of happiness is more tinged with recklessness than it was formerly—with the rapidity, the hysteria, the recklessness that hitherto have been associated in our minds with the lands and races south and west of the Channel and the Rhine and the Alps. Verily the times are changing and we in the midst of them are ourselves undergoing a change.

Today let us concern ourselves with unrest in the high school and the question, What is its relation to the wreckage in the earlier years of the high-school curriculum?

I have hesitated a little to use the expression "unrest in the high school" because so frequently the phrase "in the high school" is used unfairly. For example, excited critics shriek alarm because of "immorality in the high school," meaning, when you get right down to brass tacks, isolated cases of immorality manifested by boys and girls who, because of their years, happen to be high-school pupils. Thus they attempt to convey the impression that the high school as an institution, on account of its mismanagement or the feeble character of its administrators, or on account of its evil nature, is responsible for the immoral acts of these youth, done and performed outside of school hours and outside of school premises, and in direct opposition to all school influences. We might as well speak of the corrupt influence of Sunday schools because now and then a person who is a Sunday-school scholar commits a sin and brings shame to his parents.

So when I speak of "unrest in the high school," I do not mean the unrestful qualities or actions of persons of high-school age, but I do mean the dissatisfaction of pupils with the routine of high-school work and studies and the shifting restlessness more or less manifested among a large proportion of high-school students—not merely a negative manifestation, an unwillingness to work, but a positive tho groping and blundering movement in the direction of doing something other and different rather than doing what is set before the youth to do. They are not merely infected by the hook worm of indolence, but, stung by the wasp of energy, they are dissatisfied with the present environment as one is likely to be who is stung. It is a fact, a momentous fact, big with consequence, and it is our duty to recognize it, to account for it, to meet it, and to act so as to satisfy the need that occasions it.

Unrest and wreckage—cause and effect. Yes, true enough, cause and effect, but which is cause and which is effect? Does the unrest produce the wreckage or does the wreckage produce the unrest? Both of them are in operation as cause and both are in existence as effect.

It is not merely true that because boys are restless they drop Latin. It is not merely true that because girls are restless they flunk algebra. Is it not as true and even more important that because they fail in Latin or in algebra they are dissatisfied with themselves, with their studies, with their environment?

A high-school student who is doing well with a subject, who is mastering his daily task—such a one is not seeking to drop that subject. Achievement brings joy, to young as truly as to those who are older. Mastery brings satisfaction whether one is fourteen or forty.

The right way to win the youth to a faithful, loyal, persistent attitude toward his studies, whatever they may be, is to bring together such elements in his personality and environment as shall bring about success in his studies, mastery of his problems, achievement of his tasks, and he will find calm and satisfaction and will keep himself to faithful, persistent, loyal work and training.

The problem is further to seek. The causes of failure and so of dissatisfaction and unrest are such as these: bad physical conditions in regard to food, sleep, hygiene generally; bad habits of life owing to poor family discipline and other outside social conditions; bad social conditions in the school owing to neglect and failure to co-operate on the part of parents, school authorities, and teachers; bad conditions of teaching—done by poorly equipped, uninterested, untrained teachers; bad program conditions enforced by financial and other difficulties—allowing too short periods for rest and successful study; bad judgment in the selection and arrangement of courses; bad influences dominating the high school in the way of inflexible college-entrance conditions; bad policy on the part of the states in the provision of means and control of standards, in the equipment of its teachers; bad business judgment in the estimating of what good teaching is worth and will cost; bad morals in the false and unfair assessment of property for taxing purposes; bad management in the handling of public funds for school purposes—ignorant and negligent committees, ignorant and selfish architects, ignorant and dishonest contractors—all these wasting the funds for equipment and thus making a shabby allowance of funds for the real business of teaching; bad sense of harmony in the leaving of too much in school problems to individual community initiative, and too little to intelligent national control and ideals noble yet practical. All these bad conditions and bad practices contribute to the inefficiency of the high school and bring about the wreckage which stupid and unreasonable critics point to with wrathful joy—the wreckage which really makes the unrest in the high school.

There will be reform and improvement and it will come from one of two sources—from inside or from outside. If it comes from the inside it will mean that teachers, while working up to the limit of their powers to improve the results with the present conditions, will unite in an intelligent, reasonable, and irresistible demand for improvement in conditions in certain specified directions. And if that demand is made at once intelligent, reasonable, united, it will be irresistible. The outside will co-operate with the inside and results will come.

But if on the other hand the teachers are selfish, and refuse to give of their thought to problems of reform and cling each to the interest of his own petty advancement; or if teachers are stupid and fail to see the overturning which is bound to come; or if they stick to the toad's-eye view of life and neglect the bird's-eye view; if we find them hammering away each at his own little anvil, scratching away each at his own little plot of ground, magnifying the importance of that which is near by and petty as compared with that which is everywhere and fundamental; if, instead of showing that the schoolmaster is the master of the school and all its problems, they demonstrate that he is merely a slave in the harness, Hellenic to be sure, but a slave to his Roman master and so incapable of large thinking; then the

reform will come, to be sure, but it will come from the outside instead of from the inside, and it will be rude and crude and smashing and reckless and brutal and full of wreckage and ruin and waste and pitiful loss of much that is fine.

Such a reform was that of 1865—waste of untold blood and sorrow and treasure, abounding in hate and backward movements of reaction and full of blunders colossal and far-reaching.

But the reforms that are coming about in England today and some that are coming about in our own country seem to be of the other sort, from within and therefore sweeter and surer and freer from accompanying disaster.

Let us—we ourselves, the school-teachers—let us find out the faults and weaknesses of our schools and study the causes and suggest the remedies. A nobler aim we could not set for ourselves.

The general aim of this program of the Department of Secondary Education, in so far as it takes up new work, is to consider some of the weaknesses in our present high-school system as manifested by the wreckage of the earlier years, and, if possible, to suggest practical means by which this may be diminished. I find that there is general accord among thinkers on educational problems in this feeling: first, there is serious need for a higher grade of teaching power in the high-school teachers of the country, because the function of the high school is coming to be more clearly recognized and defined as "the people's college," indeed, that institution where, to quote Lang, "efficient citizenship, the very heart of liberal culture from the viewpoint of democracy, demands nowadays a trinity of developed senses—a vivid historic sense, the scientific evolutional sense, and a practical economic sense," and because the parent and the youth are both more exacting than formerly. That is, that the community is beginning to know what its high school is for and beginning to demand the results that such an aim calls for, and to insist that the money and machinery invested shall secure the product desired, at a minimum of waste. Millions upon millions are invested in splendid high-school plants, tax levies and bond issues are approved, and for something more and other than a rustle of white gowns and diploma ribbons, even more and other than a few banners and college-entrance certificates.

Of course these structures have many blunders and much waste and some graft. That is partly a business problem, but it should be studied and controlled more by the school man.

But the other big problem is the problem of the teacher. Let us assume that communities are able and willing cheerfully to tax themselves for the erection and equipment of plants, let us assume that there shall be a sufficiently increasing appreciation of the value of secondary education, let us assume that reasonable salaries can be offered, then will come the very practical question of supply and demand for high-school

teachers; and that topic is in the hands of one exceptionally qualified by studies general and special, Dr. Coffman, whose paper will follow this.

Then if we should find that there is in sight actually or potentially a supply of men and women now engaged in, or ready soon to enter upon, this profession, than which no other can be higher, the second very practical question arises, How about the professional equipment of these teachers? Do we demand enough? Can we safely demand more? This is the topic which on next Friday afternoon will open the program as it is to be presented by Dr. Bagley, whose authority to speak on such a topic is unquestioned.

Finally, if the supply should be found or can be made equal to the demand and if the time has arrived when a higher standard of preparation for the profession can be set up and maintained, then is there something more and something definite and practical that can be suggested to improve the situation, reduce the wreckage, and satisfy the unrest? Can improvements be made in the method of teaching, in the machinery of the actual work of instruction, in the circumstances of time and space, which will make it possible more nearly to realize the ideal in the matter of results?

We have improved on the old-time ungraded schools, running thereby into danger of dead uniformity and loss of vitality. We have reduced the number of classes to be taught by one teacher in a day from twenty or thirty to, let us say, five. We have lengthened the class period correspondingly or nearly so. We have developed specialists and organized department work to the last degree of refinement, sometimes putting a wire edge on the fine tool perhaps.

We have adopted the doctrine of interest from the Herbartians, whether as they intended it or not, and have made "going to high school" look delightful to the youngster peeping in over the fence from the grade school and its milder joys.

We have borrowed many notions from college life—some of them useful, others of them ill adapted to the period of adolescence and home life, a few of them actually pestiferous and sadly needing eradication.

But—have we learned how to distribute our week and our day and our hour? Have we thru long experiment hit upon the wisest plan for controlling, directing, stimulating the actual intellectual process of the youth's mind? Is the balance between "study" and "recitation" achieved? Is it true that the youth knows or learns during his high-school period how to direct his attention, utilize his power, study without too much of dreaming or too much of parrot-like memorizing? Is it possible that by a certain sacrifice in the direction of decreasing the number of pupils to be handled in one day by a teacher we could achieve with the individual results so much more satisfactory, reducing the annual wreckage so considerably as to make up in actual cash for the increased outlay brought about by the reduction in the number of pupils to be handled in a day by one teacher?

For the annual wreckage is a heavy waste. Right there is the weak spot. That is where the trained investigator looking for a possible reduction in cost, a possible improvement in product at the same cost, would place his unerring finger.

Near the end of my first year as a high-school teacher my principal asked me how many first-year pupils in beginning Latin were going to pass. I told him not over eighty-five out of the total of one hundred who were in my classes, and I was greatly distressed that I seemed to have made a failure with the remaining fifteen. He comforted me with the assurance that 15 per cent was about the normal proportion of wreckage in first-year pupils. He relieved my mind, but not thoroly nor permanently. The percentage is too high. Whether the fault be in the teacher or not, and after making all due allowance for bad home training, shabby preparation for high-school work, physical defects, wrong social conditions, still the percentage is too high. The pupil in many instances does not know how and needs to be shown. I will not go farther. We shall all await with keen anticipation the treatment of this topic by Professor Caldwell in the fourth and last paper of this special series on Friday afternoon.

It is true, then, to summarize, that the prevailing modern unrest, the tendency to question everything, even the things most thoroly settled, or supposed to be settled by experience, has its manifestation peculiarly in America, the melting-pot of the nations, even the more conservative stock being influenced by the presence and example of the more radical and dramatic stocks.

It is true that the failure to achieve success in the work offered produces the unrest among the youth themselves and that the causes for this too large percentage of failures are numerous and largely outside of the teacher's immediate province.

It is true, however, that there is much of deficiency and error in the institution itself, and that the needed and possible improvement ought to come from within rather than without, so as to secure desirable results with the minimum of shock and concomitant disaster.

It is therefore our special program to study the causes of wreckage, and to suggest such means as are practical for improving the quality of instruction, after learning the proportion of supply and demand, by demanding, if the time is ripe for it, a higher standard of equipment for our teachers, and then to make careful search for ways of improving the machinery of instruction, thus all together calling upon the universities, the colleges, the normal schools, the teachers themselves, the taxpayers, and the whole community to unite in an effort to improve the work and the spirit engendered, to reduce the wreckage, and to allay the unrest by removing its causes.

THE RELATION BETWEEN SUPPLY AND DEMAND FOR HIGH-SCHOOL TEACHERS

LOTUS D. COFFMAN, EASTERN ILLINOIS STATE NORMAL SCHOOL, CHARLESTON, ILL.

The relation of the supply to the demand for high-school teachers could be determined exactly by an exhaustive statistical study. The data were not at hand for this. It is a matter of common knowledge, however, that the supply of high-school teachers is inadequate to meet the demands of our rapidly expanding secondary-school system. And yet in the face of this fact efforts have been or are being made in many states to standardize the entrance requirements of this phase of teaching. These standards are registered in laws, rules, and conditions set up by local educational officers, in examination and certification systems, and in university or other institutional provisions. Every standard, be it consciously formulated or a mere matter of precedent, operates as a limiting agency; it restricts or reduces the already limited supply of teachers. The number of prospective teachers is largest when we have no standards at all and smallest when we have high standards. An inverse relationship exists between the entrance requirements of any type of teaching and the supply of teachers available for that type.

The supply of thoroly and properly trained high-school teachers is even less than the supply of high-school teachers in general. Means for the training of such teachers are multiplying and it seems that more auspicious days are dawning. In spite of a somewhat warranted antipathy of long standing that still persists here and there among university men for departments of education, colleges and departments for the professional training of high-school teachers are being created and put on more substantial footings everywhere.

Heretofore there existed a common assumption that only those who were to teach in the elementary schools needed special courses in professional training. At one time a stigma of plebeianism was placed upon such courses, because they were believed to be indifferent short cuts to low-grade careers. It was a comparatively easy matter to transfer this notion and feeling to professional courses for teachers of every kind. But as our class-consciousness has become more strictly professional, the demands have been more and more imperative that a systematic and comprehensive survey of the problems of education be required of all before they enter actively upon teaching careers. Such wide variability exists among states with reference to these demands that any attempt to tabulate them would be valuable only for detailed and technical comparative study.

There are reasons which lead me to believe that the difference between the supply and the demand for high-school teachers of the type wanted is

increasing. The recent report of the United States commissioner of education, referring to this problem, says:

> For twenty years the rate of increase in the number of secondary students has been greater than the rate of increase of population. . . . . The per cent of increase in population since 1890 has been nearly 47, while the per cent of increase in secondary students has been 208.

The increase has been more rapid at certain times in certain sections than in others. Last year, for example, it was twice as great in the South Atlantic and Western states and five times as great in the South Central states as in the North Atlantic and North Central states. This spread of secondary education in these quarters has been due not so much to the increase of teachers trained locally as to the active democratic spirit of our shifting and highly complex social life which insists upon an equalization of educational opportunities for all types of mind.

Our changed social conditions have been accompanied with a multiplication of economic opportunities. These have reduced the attractive force of teaching as a vocation, particularly for men. It rather seems that the number of men in teaching increases with the sterility of the soil and in proportion to their distance from city life, and decreases as the chances for work increase in more remunerative fields. This, however, is not the whole truth. It is a fact that when superintendents consider a man and a woman for a given position at a given salary, they have been compelled in most cases to choose the woman, because of her superior fitness for the work. It has been pointed out by Professor E. L. Thorndike, of Columbia University, that great advances in popular education have been accompanied by an increased feminization of the teaching population; that the choice of women over men has increased when the requirements have been raised; and that at least one of the prophecies of the pernicious effects of this feminization has not materialized—it has not driven boys away from and kept girls in the high school. This feminization is the natural result of a swift-moving social evolution; it cannot be averted. Nevertheless, for many reasons which appeal to common-sense, men are wanted; but many of the men we should have to choose, if we chose any, are not wanted. Nor are we likely to attract the most gifted until the rewards in teaching are made fairly commensurate with the rewards in other professional pursuits.

The tendency toward a professional craft spirit among high-school teachers is shown in the total length of their experience and in the number of years they have taught in their present places. Figures pertaining to these items will measure roughly the original capacity and the interest and zeal of the teachers to render service. A reasonable degree of permanency in the work at a given place might be taken as indication of a professional attitude, while shortness of tenure and transiency may be regarded as indications that teachers are more controlled by selfish than by altruistic

motives. These statements are merely attempts to describe the situation in terms of emphasis rather than in terms of inclusiveness, for it is well known that some teachers move because they can be of more service and some remain in their present places because they never have a chance to move.

I have recently compiled data for 3,058 teachers in high schools on the list of the North Central Association of Colleges and Secondary Schools. My returns show that the range of experience of high-school teachers is 41 years, but the median number of years of experience men teachers have had is 6; women teachers, 5; irrespective of sex the median is 5. These figures are a little less than those found by earlier investigators. It may be that a wider selection would have raised the median age a little, but not much. According to these returns there are as many teaching in high schools who have had four years or less of experience as there are who have had six years or more of experience. They mean that we have in five years enough changes in the high-school teaching population to equal the total number of teachers in it in any given year. It is obvious that teaching is still used by many as a stepping-stone to other fields of activity. Men give it a greater professional stability than women, for they remain in it longer; but the length of time they remain is not long enough to insure professional solidarity.

The mobility of these 3,058 teachers is tremendous. The median number of years of experience the women have had in their present positions is 3, and for men it is 2. Of the women 27.8 per cent and of the men 33 per cent are teaching in their present places this year for the first time. In round numbers about every third high-school teacher moves annually, and the staff of the average high school is changed once in but little more than three years. These figures are fraught with great significance to the practical school administrator, particularly when he recognizes that there are as many high-school teachers who have taught a year or less in their present places as there are who have taught three years or more. With such a shifting group the difficulties and burdens of the administrators are increased. There is hardly an even chance that a new high-school teacher will stay long enough in a given position to stamp his personality upon the school, and so to enter into its life as to leave behind him a tradition for serious study and worthy intellectual stimulation. He can hardly be said to be a factor in the life of the community in two years or less of time. Is it any wonder that some communities look upon high-school teachers as a type of more or less cultured transients?

While the teachers are partly, they are not wholly to blame for this condition of affairs. The struggle for mere existence is severe, but it is not any more severe than the struggle for abundance. Communities not infrequently require a standard of living of high-school teachers beyond the possibilities of their salary. The tastes of the teacher might be those of

people in refined economic leisure, but the salaries prevent the enjoyment of these higher things. Between what they ought to do and what they can do there is a wide gulf. This partly explains why young men are increasingly dissuaded from entering teaching. Certainly an income that increases in a ratio less than the corresponding ratio of increase in the cost of living tends to attract mediocrity—not talent.

Altho men stay in teaching longer and thus give greater permanency to it than women, they move more frequently and thus become less a part of the life of any particular school or of any particular community than the women. This failure of theirs at least offsets, I think, what teaching in general gains from their greater permanency. What the implications of this situation are, I do not care at this time to attempt to elaborate.

Another measure of the demand for high-school teachers is shown in the amount of experience they have had before they begin teaching in a high school. Superintendents and principals persistently seek candidates with experience. From their insistence one might suspect that his chances were greatly lessened for securing employment in a high school if he were wholly without experience. Of course if there were two candidates of equal training and of equally desirable personal qualities, one with and the other without experience, the former in nearly every case would receive the appointment. But considering the matter by and large without relating it to any certain place, the truth is that there are almost as many high-school teachers elected each year without experience as with experience. This hardly seems believable and yet the figures I have collected show that 42 per cent of the men and 55 per cent of the women high-school teachers had had no experience at the time of their election. Almost 49 per cent of the secondary teaching corps thus got their initial experience in high-school work.

It may be urged that this inexperienced half are better trained. Without doubt this is true sometimes, but not always; nor is it the rule. Common observation and common-sense teach us that in the case of numerous individuals and of certain communities and institutions, training is not rigidly adhered to as a standard of efficiency. The operation of idealistic, sentimental, religious, political, and blood-kin considerations still plays a conspicuous part here and there in the selection of teachers.

When experience is related to salary, using salary as an objective measure of efficiency, the correlation is almost perfect for the first four or five years, that is, each additional year of experience calls for a fixed ratio of increase in salary. After this there is practically no correlation at all. By this I do not mean that salaries are never increased after this time. If they are, the occurrence as a rule is due to the existence of salary schedules or to individual differences, and not to the operation of mere experience. About the time, therefore, that the average high-school teacher has completed his apprenticeship and has received the stamp of public approval for his

increased efficiency, he forsakes the calling. A most liberal estimate will not give him more than two years of service after he has attained this maximum of efficiency.

This relationship, and the fact that half the time we cannot get experienced teachers, furnish, in a reflex way, measures of the supply. Half the time we must take young, inexperienced college graduates. Most of these come in expecting to stay but a short time and they do stay but a short time. They risk little and they gain little, but their little risk and little gain are checks on the more rapid advance of the profession as a whole.

A measure of public necessity is indicated by the number of graduates of different types of institutions found teaching in high schools. If figures could be secured for a country-wide investigation, answers to the following questions would be interesting, if not valuable: What proportion of our secondary teachers are college graduates? normal-school graduates only? high-school graduates or less? The natural history of 1,386 teachers in high schools on the accredited list of the University of Illinois shows that 4 per cent have had no training beyond a high school, 8 per cent have had normal-school training only, 67 per cent have had university training only, and 21 per cent have had both college and normal-school training. These returns probably represent a higher percentage for college-trained and a lower percentage for normal-school trained teachers than one would secure were he to take a random sampling of teachers from all classes of high schools, and not those on an accredited university list only. Nevertheless these results are first-hand evidence of what the public wants or must use in the way of training. More than two-thirds of all the high-school teachers of Illinois—and I find this to be almost universally true—are college trained. In Vermont 74 per cent of the secondary teachers are of college grade; in Washington 82 per cent; in New Hampshire 92 per cent; in New York and Massachusetts, nearly 100 per cent.

Perhaps one reason why we have not more persons of normal-school training teaching in high schools is because the normal schools have not heretofore provided such training as would equip their graduates for this kind of work. It seems more probable that the academic and professional training of such teachers will be secured more and more in university and college departments. I, personally, am of the opinion that with certain exceptions, college graduation should be held as the final minimum for beginning high-school teaching.

Certainly the kind of people we have in teaching necessarily affects the kind of teaching we get. Differences in traditions, in social class, intellectual maturity, and in academic and professional training, must be important factors affecting public opinion of the merits of the teacher and of his work. High-school teachers represent a select class; but with them as with the majority of all other classes of teachers, the professional motive comes late. The great problem of the administrator is that of creating a

spirit of professionalization. For the great majority when they first enter teaching this ideal is chimerical. It exists among the favored few who recognize the high value of their servantship. The demand is for this kind. If the supply could be touched with this spirit, we should be dominated by professional ethics, and should no longer be a mere aggregation of units.

THE PROFESSIONAL TRAINING OF HIGH-SCHOOL TEACHERS

W. C. BAGLEY, PROFESSOR OF EDUCATION, UNIVERSITY OF ILLINOIS, URBANA, ILL.

Shall we make a requirement of strictly professional study in the selection of high-school teachers? I understand that this question refers to the general policy that high-school authorities should adopt. We have in many states, of course, something that is, in effect, a requirement of professional study. That is, college graduates are licensed to teach if they have completed a certain number of hours in the study of educational history and theory. California has added a half-year of practice teaching under supervision. Illinois, however, stands at the other extreme, licensing no teacher—even when graduated from its own normal schools—without an examination, and encouraging professional study only by including professional subjects in its examinations, especially for state certificates.

Legal requirements, however, are not of especial interest to us at the present moment. The problem that I wish to discuss is whether the time is ripe for high-school men in general to take the same attitude toward professional training that they have already taken, with such beneficial results, toward collegiate training in subject-matter as a qualification for high-school teaching.

There are several arguments for and against this policy that I should like to discuss with you briefly.

In the first place, there is the argument from analogy with other professions, but this need not detain us long. Law and medicine require professional training of their candidates for licensure; but it may be argued that, for the high-school teacher, the study of subject-matter to be taught really constitutes professional training for the teaching of that subject-matter, and that, in demanding a college education from high-school teachers, we are doing all that is necessary to satisfy the analogy.

In the second place, it may be inferred, again by analogy, that strictly professional training has proved valuable in the preparation of elementary teachers and will prove equally valuable for high-school teachers. Rather careful statistical studies indicate that courses in psychology, educational theory, and practice teaching under supervision, actually operate to increase the efficiency of beginning teachers in the elementary schools. I refer here particularly to Meriam's investigations and to the study of Ruediger

and Strayer on qualities of merit in elementary teachers (*Journal of Educational Psychology*, Vol. I). In the latter study, it is shown that graduates of normal schools in general rank higher among elementary teachers than graduates of colleges; that is, when elementary teachers are ranked according to merit, a larger proportion of the normal graduates are in the higher ranks; while, of all the college graduates in elementary service, a large proportion—about 44 per cent—are in the two lower ranks. The factor of selection probably operates here (that is, the elementary school selects the best college graduates); but even allowing for this, it is reasonable to assume that the strictly professional training of the normal school is an operative factor.

One might infer, then, that because strictly professional training improves the efficiency of the elementary teacher, it will improve the efficiency of the high-school teacher. But against this it may be urged that the conditions in the two types of education differ and that the same rules do not hold in both. The burden of evidence lies, then, with the advocate of professional training. He must bring facts and not a priori inferences to the support of his contention. What facts are available? Have we any investigations proving that strictly professional training does result beneficially? Or, if these facts are not available, or thoroly satisfactory, have we data that will show that the weaknesses of beginning high-school teachers are such as seem remediable in some measure by professional training?

With reference to the first question, we have little satisfactory evidence. It is difficult to compare on a wide scale the success of teachers who have taken professional work in their college courses with the success of college graduates who have not had such special training. The only extensive study that has been made is that of Boyce (*Journal of Educational Psychology*, March, 1912), who had about four hundred high-school teachers ranked by their principals, and who found a slight tendency in favor of professional training; that is, the teachers having this training showed a slight but suggestive tendency toward a higher ranking than teachers lacking the training.

Taking this evidence for what it is worth, let us now pass to the next question. What are the important factors of efficiency in high-school teaching and what are the most significant sources of failure? Are these factors of strength amenable to improvement thru training? Can the weaknesses be remedied by training?

Boyce in his study of the rankings of high-school teachers, first according to general merit, and then according to specific qualities of merit, found that the most significant factor in general efficiency is ability to impart instruction. This means something more than scholarship or knowledge of subject-matter, for this factor was also included and took a lower rank. In other words, technical skill in instruction is a factor of

prime importance, and this, it is obvious, is amenable to directed growth thru the proper type of technical preparation.

Another specific quality of great importance is the ability to control pupils or administer "discipline," and this, too, as has been demonstrated in the preparation of elementary teachers, is subject to directed growth thru a mastery of technique.

Other important qualities are not so readily amenable to improvement thru a directed course of technical preparation. These are ability to co-operate, studiousness, and ability to stimulate individuals.

Let us now pass to the causes of failure or the sources of weakness in high-school teachers. Last spring, I had sent to five hundred superintendents a letter requesting information concerning the teachers who last year were dropped from the high-school corps because of failure in their work. I asked simply for the number of failures and for the cause or causes of each, as the superintendent diagnosed them. The results show that the most significant cause of failure is the inability of the teacher to adjust himself to the community. This might be termed a weakness in personality, but the supplementary information volunteered by a number of superintendents to the effect that normal-school graduates evidence this weakness much less than college graduates leads me to suspect that the proper professional training may do something and possibly a great deal to correct this weakness.

Other important sources of weakness are deficiency in instructional ability and deficiency in discipline, and these factors, as we have pointed out, are amenable to control thru adequate preparation. Weakness in scholarship does not seem to be an important cause of failure and, in general, the causes of failure complement in a very convincing way the factors of efficiency as determined by Boyce. (I may also add that a similar census of over five hundred failures among elementary teachers confirms with equal force the conclusions of Ruediger and Strayer regarding factors of efficiency in grade teaching.)

I now wish to take the bull by the horns and say something about this puzzling and irritating factor of personality. This is acknowledged to be one of the most important factors in teaching efficiency, and it has generally been assumed to depend entirely upon the operation of forces that cannot be controlled or modified. In short, this is the factor that has been looked upon as an endowment—a native gift—which training and education cannot modify in any measurable degree.

Now it would be futile to deny that there are certain individual qualities that cannot be modified by taking thought upon them or subjecting oneself to any sort of instruction, inspiration, or discipline, and it would be futile to deny that these unmodifiable traits are important and significant in the personality of the superior teacher. But I am confident that we have overestimated, here as elsewhere, the number of these fatalisti-

cally unmodifiable traits, and I am prepared to back up my confidence with some rather definite evidence.

What I am concerned with here is the meaning of the term personality as this term is used by the practical school man in speaking of a teacher's qualifications.

This term is so important in selecting teachers that last year I suggested to a graduate student, Mr. F. L. Clapp, that he spend his research time upon its analysis. He first secured from one hundred school men a list of the ten subordinate and specific qualities that each believed to be implied in the larger term "personality." As might be expected, a large variety of specific qualities were mentioned; but, as also might be expected, on certain of these qualities there was a very general agreement. These in the order of their importance were:

1. Sympathy
2. Personal appearance
3. Address
4. Sincerity
5. Optimism
6. Enthusiasm
7. Scholarship
8. Vitality
9. Fairness
10. Reserve or dignity

It will be noted that of these, sympathy, sincerity, optimism, enthusiasm, vitality, and to some extent reserve, will be conditioned largely by innate forces; but appearance, address, scholarship, and to some extent reserve, may be significantly modified.

In order to get at the matter in a way that would eliminate the personal bias and prejudice expressed in these analyses, the list was sent to four hundred school men with the request that they rank their six best teachers, first with reference to general personality, and secondly with reference to each of these specific qualities. One hundred forty rankings were returned, representing over seven hundred superior teachers. From these data the correlation between personality and each of the subordinate qualities was computed by the Pearson method. The order of the qualities thus determined was as follows:

1. Address
2. Personal appearance
3. Optimism
4. Reserve
5. Enthusiasm
6. Fairness
7. Sincerity
8. Sympathy
9. Vitality
10. Scholarship

The indices for address and personal appearance were especially high, and suggest that these factors, which can be modified, are of fundamental significance in what we ordinarily term personality. Let me repeat that this ordinary conception of the term is what concerns us in the present connection.

Two types of evidence confirming this suggestion, that personality is not the fatalistically unmodifiable thing that we have supposed, are also included in this study. It was found, first, that "general personality"

is directly correlated with experience—in general the teachers of longest experience were ranked highest. This may mean, of course, that the teachers of strong personality survive; but it may also mean that the teacher acquires a good many of the important elements thru the discipline of experience. In the second place, there is a strong and unequivocally direct correlation between personality and training in normal schools and colleges—the proportion of teachers in the two highest ranks of personality increasing steadily from the group with no normal-school or college preparation to the group that represents both normal-school and college preparation. Again, it may be contended that the normal school and college select the best personalities to begin with, but this would be very difficult to establish. I believe that it is safe to conclude that this factor of "teaching personality" is not the fatalistic bugbear that we have hitherto assumed, but that several of its most important elements can be improved thru the discipline of experience, and this means, of course, that the proper sort of training (which always seeks to accomplish what actual experience accomplishes, but in a shorter time and with less waste) may influence this factor in a manner that is subject to direction and control.

I am not so foolhardy as to maintain that the technical training of the normal school or of the educational departments of the universities has yet reached a point of development where it can with certainty give just the right training to each prospective teacher. I do assert, however, that, so far as the facts at our command point in any direction, they point toward the value of technical training for teachers of both elementary and high-school grade.

Now many of the qualities that make for efficiency in high-school teaching can be adequately developed in the college only by providing properly supervised practice teaching in schools of secondary grade. It is only thru work of this sort that initial efficiency in instruction and discipline can be markedly improved. Very few of our colleges and universities, however, at present command these facilities. In the meantime, many of them require courses in educational theory and history amounting in some cases to fifteen or twenty semester hours. Personally I do not believe that so heavy a requirement is justified. Hitherto in the University of Illinois no professional work has been required of intending high-school teachers, altho a large number of students have voluntarily elected professional work. I have discouraged an overplus of such work on the part of students preparing for classroom teaching, on the ground that we could not justify too much of it in comparison with the claims of the subject-matter to be taught, which should, I believe, constitute the bulk of the student's preparation. Last spring, it was suggested that a minimum of six semester hours in education be required of all students who wished the official recommendation of the university for high-school appointments. It was specified that three of these hours should be devoted to a survey of the field of education with the aim of acquainting the student with the

nature and function of that type of social service which he proposes to enter, and to a brief but compact statement of educational principles. The other three hours should be devoted to a study of the technique of instruction and class management with observation of secondary work, and practice in constructing detailed plans illustrating different types of teaching.

If practice teaching facilities had still been available, as I hope that they will again be within the next biennium, we should have recommended a full semester of practice under supervision for inexperienced candidates. This would have made eleven semester hours in all of strictly professional work. I contend that this is a moderate allotment and I also contend that, if properly conducted, courses in this amount and of this character will operate to raise significantly the initial efficiency of the high-school teacher. I may add that this recommendation was adopted by our university senate with but three dissenting votes.

Now the factor that this type of training fails to look after is the same factor which was brought out in our study of the causes of failure—namely, the ability of the individual to adapt himself to the community that he serves. It is here that the normal-school graduate is superior to the college graduate; and that superiority is due, I believe, not to any specific courses that the normal school offers, but rather to the attitude of professionalism which the atmosphere of the normal school engenders and to which every detail of its organization must contribute. In a large university, this factor is difficult to reproduce. Something, of course, may be done by instruction; students may be warned to avoid certain activities and attitudes when they begin their teaching; they may be lectured to about professional ethics; and we take every opportunity to force these important principles and precepts home. But the attitude of professionalism—the spirit of consecration to service—cannot be satisfactorily engendered in this way. What is needed is a somewhat separate organization within the university which shall represent the profession of teaching, and thru which a craft spirit may be developed. I believe that secondary-school men would promote the interests of their cause by urging in every legitimate way the organization of such separate schools.

THE INFLUENCE OF PROLONGED AND CAREFULLY DIRECTED WORK

OTIS W. CALDWELL, SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

1. NO INCREASE IN THE PERCENTAGE OF PUPILS WHO COMPLETE A HIGH-SCHOOL COURSE

In the period between 1900 and 1910, the number of pupils in public high schools in the United States increased over 76 per cent (from 519,251 to 915,061).[1] During this same period the number of high-school

[1] *Annual Report, United States Commissioner of Education*, 1911, p. 9.

teachers who teach these pupils increased over 100 per cent (from 20,372 to 41,667). The number and value of high-school properties increased proportionately during this period, including better quality and quantity of facilities for work in libraries, laboratories, gymnasia, etc. But there has been no increase in the proportionate number of pupils who complete the high-school course. For each of the last twenty years, approximately 12 per cent of the enrollment of the high schools has been graduated. Regardless of the increase in facilities, and of an increase in teaching force, which is one-third greater than the increase in the number of pupils, and of an assumed increase in the relative efficiency of their teaching force, and regardless of the increased public belief in secondary education, there has been no increase in twenty years in the percentage of high-school pupils that take a full high-school course. The fact that they begin the work indicates clearly that someone in control regards it as worth while for some reason for these pupils to engage upon the work of the secondary schools, tho they may at the outset expect to do but one or a few years of the work. But the fact that approximately 88 per cent do not complete a course indicates that most of those who thought it worth while to enter the high school, for some or many reasons do not find it possible or perhaps not worth while to follow out the course, even if at the outset they intended doing so.

II. FAILURE TO CARRY WORK ONE DOMINANT FACTOR IN PUPILS LEAVING SCHOOL

Among the many factors that operate to cause pupils to leave high school, failure to carry the work is prominent. In one Chicago high school 432 pupils entered the Freshman class in the autumn of 1909. Of these 432 pupils, 338 left school before completing the third semester, thus leaving 94 of the original 432 in school. Of those who left, 124 made no passing credit in the school and 121 others failed to receive passing credits in 43 per cent of the subjects which they took. The remaining 93 pupils who left school made average grades above 80 per cent (75 being the passing grade in this school), tho the pupils failed to secure credit in 22 per cent of their subjects. There were, therefore, 245 of the 338 pupils who had a percentage of failure from nearly half to all of their subjects, and 93 pupils who failed in 22 per cent of their work. The 94 pupils who remained in school failed to receive credit in slightly less than 5 per cent of their subjects.

It seems possible that this case is more striking than would usually appear from such investigations, since the problems associated with this particular school may be peculiarly difficult.

In a careful study made by Mr. G. R. Johnson, of St. Louis, and covering records from twelve high schools with a total number of 18,926 pupils, he finds that approximately 90 per cent of those pupils who were failing in their work left school, while but 10 per cent of those who were making 90

per cent or better in their work left school. This percentage of those who failed and left school remains almost constant thruout the four years, with the exception that in the Chicago and Kansas City schools rather a larger percentage of the failures drop out in the earlier years than in the later years, while in the smaller schools the percentage of dropping-out of those who fail remains about the same thruout the whole high-school course.

Doubtless the compulsory attendance law and the sixteen-year labor law are factors in continuing for a time the attendance of pupils who do poorly; and that with the close of the sixteenth year economic and social necessity takes these pupils out of school. But we must note the fact that the percentage of failures who leave school remains almost the same for all the years of the high school. Possibly the termination of the period when pupils must attend school may operate to relieve those who are failing from the necessity of further attendance in an institution in which they do not "make good."

III. SCHOOL METHODS AS CONTRIBUTING CAUSES TO THE FAILURES WHICH LEAD PUPILS TO LEAVE SCHOOL

Among the many and intricate factors which affect the relative success or failure of pupils, the methods of dealing day by day with the series of topics that make up a given study are of supreme importance.

The present situation.—In the elementary schools from which these pupils have come to the high school, the school day runs from 8:30 or 9:00 o'clock to 3:30 or 4:00 o'clock and the greater part of all study is done during school hours, under direct or indirect supervision of the teacher. The teacher is present to correct any misunderstandings in assignments, to give a directing question or suggestion, or to quicken the endeavor, when such is needed. The work of one year is fairly well connected with that of the preceding years and partially new and partially old ground is covered each year. In the high school, particularly in the first year, the subjects of study are largely or wholly new, often so new as to constitute fields quite unknown to the pupils. Even when some of the subjects are not new we have a larger change than occurred between any two elementary grades. Pupils in a given subject go to the special room of the teacher for their recitations, recite and receive their assignment, and then go to another classroom for another subject, or return to their assembly room or to their homes with their assigned work for the next day. The teacher in the elementary school ordinarily meets the pupils of a given grade for most or all of their work, and knows them as they appear in all their work. In high school each teacher is especially interested in one or a few subjects and this one or few are the only ones in which the teacher knows his pupils. In the elementary schools the teacher often stands as representative of one grade of pupils. In the high school the teacher usually stands as representative of a subject.

Not only does the first-year high-school student encounter new content of subject-matter, but usually a new kind of school day. Many high schools begin work at 8:30 or 9:00 o'clock and close at 1:00 or 1:30 or 2:00 o'clock. In many schools all of the hours in school are occupied in recitation or laboratory work, all individual study or assignments being done away from school.

The conditions for home study present all the possible variations, but most home study must be done under discursive influences—a little study, a little conversation about irrelevant matter, an intermittent discontinuance for small household duties, a prolonged intermission for recreation, with the half-consciousness of wrong-doing because of unfinished and over-hanging lessons, even interrupted sleep because of a host of unfinished tasks, a final effort to secure categorically such facts regarding the assignment as are essential to enable the pupil to meet the teacher, a consciousness of incompleteness of preparation and a hope that, if called upon at all, the call may come for the facts that are in the pupil's meager store. Often the pupil's own initiative to home study must be supplemented by commands or entreaties from parents; sometimes parents must do pupils' work for them, under penalty of family chagrin due to impending failure of the child. In most cases poor habits of study, an essentially immoral attitude toward study, result from purported home study, tho some pupils of good ability and strong individuality may do quite effective or superior work thru home study. The habit of dawdling, waste of time in getting to work, wondering whether the work really must be done, whether a lexicon, encyclopædia, or parental answer to questions may not be found, leave an entirely improper attitude toward real study. Sham work, at first as a makeshift, later becomes the only kind of which some individuals are capable.

IV. EXPERIMENTS TO DETERMINE THE RELATIVE VALUE OF DIRECTED CLASSROOM STUDY

In the effort to improve the above situation it has seemed to several people to be worth while to see if more carefully directed classroom study, less so-called recitation, and less home work might not yield better results.

A. *Experiments in mathematics.*—Some experiments have been carried on by Mr. Ernst R. Breslich of the University High School department of mathematics, reports of which are published in the October, 1912, *School Review.*

At the outset Mr. Breslich found that some pupils who did poorly on their assigned work did not understand the suggestions that had been given regarding good ways for undertaking the home work. Parents insisted that the assignments made were impossible, whereas for one reason or another the pupils had failed to get essential suggestions regarding the assignment. Even with assignments clearly understood certain habits of home study which did not exist had been assumed. A series of visits to

other classes showed similar conditions. Pupils reported poor results from their home study, various excuses or no excuses being offered. The teacher explained away the pupil's difficulties and, in most cases, the pretense of having the work done at home was continued.

To ascertain the ways in which the members of one class attack their work, Mr. Breslich assigned a lesson, taking unusual care to make clear all phases of the assignment. The class was then told that the next fifteen minutes would be given to studying the lesson assigned. All pupils were slow in beginning the work and some occupied all of the fifteen minutes in getting ready to go to work. Some who ordinarily came to class with well-prepared lessons looked about to see how others were undertaking the work, and then followed them. Few really accomplished anything in the fifteen minutes.

To investigate more carefully these individual habits of study, Mr. Breslich told his classes that at a certain hour each day the classroom would be open to students who had difficulty with assignments or wished to make up back work, and good use was made of this opportunity. The teacher passed about among the pupils as they worked, making suggestions, but rarely answering questions directly.

It was then decided to make more prolonged trial of this supervised study with all members of one class. In one section of the class no home work was assigned and in the other section home work was assigned in the usual way. The two sections had the same work. Both spent fourteen lessons on simultaneous linear equations, at the end of which the same test was given to both sections. The relative standings in grades which these two sections received upon the same examination, at the close of the preceding semester in mathematics, prior to these experiments are:

Section A, average 81.4; Section B, average 79.4, B being slightly weaker than A. In Section B 5.9 per cent of the class had failed in the preceding semester and none in Section A.

Section A was given home work with no classroom supervised study. Section B was given supervised study and no home work. Upon the examination following the fourteen lessons their standings were:

Section A, home work, average 62.8, with 50 per cent receiving the failure mark.

Section B, supervised study, average 65.5, with 31.2 per cent receiving the failure mark.

It is to be noted that Section B, a somewhat weaker section, surpassed Section A, and that its lower number of failures indicates that the poorer pupils profited most from the supervised study. Section A reported an average of $1\frac{1}{4}$ hours spent on each lesson, while in Section B the actual time of class work was 36 minutes per day. Section B solved an average of two problems more to each pupil than did Section A. With the supervised class work as a basis, too much time was spent on the home assignments. Section B worked slowly during the first three lessons, but with the development of

independence and confidence they soon worked rapidly. The interest and pleasure of Section B, some of whom had failed in the preceding semester, were noticeable.

In the following topic to which six lessons were given, the methods were reversed, Section A being given supervised classroom work and Section B home assignments, and class recitations. At the close of this series of lessons, the same test was given both sections with the following result:

Section A, supervised work, no home work, average, 77.5.

Section B, home work and recitations, average, 86.4.

12.5 per cent of Section A failed on the test and 5.7 of Section B failed.

31.2 per cent of Section A secured a mark of A, and 52.9 per cent of B secured the A mark.

This seems to show that the pupils in Section B, by means of their previous fourteen supervised lessons, had learned enough about independent study to enable them to do their home work in such a way that Section A even under supervision did not surpass Section B in six lessons. The ability of Section B gained under supervision persisted in home study thru six following lessons.

B. *Detroit experiments in algebra and Latin.*—In the Detroit Central High School a different plan has been followed, but one which relates to this topic. Principal David McKenzie writes:

We have experimented somewhat with a plan to give additional direction to the weaker pupils of the ninth grade. I cite the two cases of first course in algebra and Latin. At the end of ten weeks all pupils who were marked failing in these subjects were grouped together for special work in addition to their regular recitation periods. They were given twenty lessons each, on the ground covered during a period of six or seven weeks. Each pupil was treated as a pathological subject. In the final test they were marked as follows:

LATIN

Total number of pupils	15
Number marked "Good"	6
Number marked "Excellent"	1
Number marked "Fair"	3
Number marked "Weak"	1
Number "Not passed"	3
Number "Left"	1

ALGEBRA

Total number of pupils	20
Number marked "Excellent"	2
Number marked "Good"	4
Number marked "Fair"	3
Number marked "Weak"	5
Number marked "Not passed"	3
Number marked "Left"	3

It is plainly evident that a large number of ninth-grade pupils need greater direction than they receive at present, and I am convinced that we must resort to some plan to give them this additional help, if we are to eliminate excessive mortality in this grade.

C. *Joliet double-period plan.*—In the Joliet Township High School for some years two periods per day, ten hours per week, have been given in all, to all science work, manual training, domestic science, and mechanical

drawing. This school has also used this plan with beginning algebra, beginning geometry, and beginning history, possibly other subjects also. In Joliet the consensus of opinion of teachers is that the scheme is successful. The principal states that by such a scheme "the percentage of failures may be reduced to a minimum, and that is a compensation for the slight increase in teaching force and extra amount of money spent for teaching."

D. Murphysboro manual-training experiment.—At Murphysboro, Ill., an experiment has been under way which, while not bearing directly upon our question, has a collateral bearing upon it by indicating that even single periods and more prolonged periods of class instruction may be used in such ways as to make the shorter and not the longer period desirable, tho doubtless longer periods usually seem desirable.

A small class of boys in manual training was divided, one section being given single periods for this work, the other the same number of double periods. The principal, Mr. G. J. Koons, stated that the single-period pupils were not above the double-period boys in their general class standing nor in ability. All were given piecework and records were kept of the hours used by each boy in completing each piece of work. Eleven pieces of work were completed by each pupil. The single-period pupils used approximately 25 per cent less time on an average for each piece than the double-period boys, and on the test given to all at the close of the work, the single-period pupils averaged 7 per cent above the double-period pupils. This experiment suggests a possible waste of time in longer periods, possibly lack of readiness in attacking work, of attention and high tension of effort thruout the period. It is well known that appreciation of relative shortness of time available usually results in higher alertness, readiness of attack, higher tone, and more constant prosecution of the work in hand. It must be kept in mind that the Murphysboro experiment involves a small number of pupils and withal may be more of a suggestion of method than of the value of any particular length of period given to a study. Most teachers who have tried classroom directed study find double periods, part for study and part for general discussion, most effective.

E. *General science.*—Thruout the whole United States there has been a significant attempt to introduce courses in general science into the first year of the high school. While in different schools these courses vary largely in their content, length, and in many details of method, they agree in their purpose of being less formal, less rigid and abstract than the highly differentiated sciences, and in selecting and treating topics in science in such ways that the pupils think thru these topics with good methods of thinking and with a knowledge content that appeals to the pupils as being worth while. The dominant method is that of class study of real things and real situations. An active attempt is made to secure individual experimentation or individual study from every pupil. The whole general science movement is an attempt to secure a scientific method of work upon

concrete problems, the significance of which appeals to the worker. We have been putting first-year pupils into formal sciences which were beautifully organized and orderly, possibly even elementary from the point of view of the adult science and research student, but which are an abstract field to the pupil who has not been led to rationalize the common phenomena of his surroundings. This general science course has met a splendid response and its method has resulted in more effective work in subjects other than science during the first year and in the sciences in the following years. It is stated by teachers and principals that where significant laboratory courses in general science are given, fewer pupils fail in their work, more remain in school in the second year, and there is a much larger demand in subsequent years for courses that utilize laboratory methods, similar to those of general science courses. The method and significant content of the general science course seems to prepare in ability to work and in desire to work in other laboratory courses. My own observation leads me to conclude that the oft-made statement that pupils are naturally averse to work is much exaggerated. If properly guided to independent, purposeful study, really significant work becomes a pleasure to most pupils.

General science is an attempt to get back to the valuable parts of the natural history of our fathers, the purposeful, dynamic, thoughtful, but elementary interpretation of common, significant problems, the kind of interpretations which physiography promised to give when it first came into secondary schools and which physiography may still serve to unify better perhaps than any other single branch of science.

The more fully directed study in general science and in other laboratory sciences presents an opportunity for individual, first-hand study of concrete things, for experiment and interpretation of phenomena. But, as is true in other high-school subjects, it is wasteful for the science teacher merely to assure himself that the pupils and materials are inclosed within the same room. Science in which we boast of concrete studies, of the laboratory method, and of the possible significance of content that is unsurpassed has sometimes become as formal in its home assignments, as unlikely of achievement, its recitations as free from individual dynamic activity, as any other subject. It, as well as the other subjects, needs to be revived by use of its own concrete laboratory method. Laboratory teaching in science or other subjects may rise to the highest level of excellence or may descend to a meaningless mechanical manipulation that is deadening. But it is believed that the laboratory method offers us an important method greatly needed in all our high-school subjects, and most seriously needed in the first years of the high school.

V. SOME NECESSARY CHANGES IN THE METHODS OF THE ABOVE

The cases cited above in which increased efficiency of classroom work is sought are too few to be conclusive, but they are highly suggestive if in

the absence of more conclusive guidance we assume that these experiments point to a proper change in procedure.

It must be obvious, that if such methods of high-school work are used, some important changes must be effected. Most important of all is wider recognition of real teaching, real development of pupil-power, as compared with assigning and hearing lessons and telling facts to pupils in case they have not understood them. Recitations and class discussions and home assignments should not be wholly omitted, but these may profitably be much reduced. Then, when teachers direct their pupils in study, assignments may be expected to become more appropriate, more carefully planned, less frequently made at the close of the period as the class is starting from the classroom. The assignment is a highly important part of the period's work, and it is an educational misdemeanor to make an incomprehensible assignment.

The extension of these methods of study would help to eliminate some of the abuses of the ordinary classroom recitation. In order to ascertain what opportunity each pupil has to respond in class, the following records were made by Mr. Breslich upon visits to classes other than his own. In one first-year class of twenty-two pupils one pupil recited twice, one eleven times, the others ranging between these; in another class of thirteen pupils, one recited four times, another eighteen times; in another one recited six times, another twenty-three times. With directed individual study, each would have fuller opportunity for work. It does not follow that all general discussion should be omitted, but in directed work there are ample opportunities for general discussions. Nor does it follow that no home work should be assigned.

A more intimate interest in each pupil is possible thru classroom study. The ordinary assignment of home work and classroom recitation method tends to reduce all the class to a base level. Classroom study enables the teacher better to teach the weak pupil and the strong pupil, each to his highest efficiency. The class recitation method—a sort of vermiform appendix on our educational system—often consists either in allowing the best students to do the work or in having them sit idly by, developing habits of low tension while the teacher attempts to pull up the weaker ones to a fair understanding of the point at hand. It requires a higher order of ability to teach genius than mediocrity, and our present classroom methods often ignore genius, thru an ill-balanced sense of duty to the mediocre, or neglect the majority in the interests of the few brighter pupils. Well-balanced study should enable the teacher to stimulate all to a high degree of effort.

Classroom study means a longer school day and more teaching force, or longer hours for the present teaching force. The school day should be longer. Germany has approximately thirty school hours per week to our approximately twenty hours per week in our secondary schools.

Almost all high-school work should be done at school in school hours under guidance of real teachers. Less assigned home work will mean less carrying of responsibility for school duties during the hours at home when often such responsibilities cannot be met and under conditions which often foster ineffective habits of study. There will always remain plenty of good home work; good reading, some assignment upon work in line with school work; but our pupils should no more carry home with them the larger burden of their school work than a good business man should take home with him his major business duties.

The longer school day is not to be feared, but welcomed, if by means of it adequate time for proper study is secured. We have cheapened our schools by shortening them. Even longer hours for teachers, the time being given to more prolonged and more effective teaching in a reduced number of classes, is not undesirable, if by means of these longer hours more effective teaching and less wreckage thru failure in high school may be secured.

REPORT OF THE COMMITTEE ON COSMOPOLITAN HIGH-SCHOOL CURRICULUM

SPENCER R. SMITH, PRINCIPAL OF WENDELL PHILLIPS HIGH SCHOOL, CHICAGO, ILL.

The Committee on the Cosmopolitan High-School Curriculum has been delayed in its work because of the lack of funds to proceed. At the July, 1911, meeting of the National Education Association at San Francisco a small appropriation was allowed.

With this money in hand and with an addition of three members, the work has been reorganized. At the St. Louis meeting in the winter of 1912, the committee had a session at which it was decided to reinforce the plans of organization of work as presented at the Boston meeting of 1910, by the questionnaire detailed below, thru which is sought the opinions of the high-school men of the country as to the ideal high school, the obstacles in the way of reaching such ideal, and whether the ideal in mind is arbitrary or fitted to the community. The plan of work presented at Boston was somewhat modified at the St. Louis meeting and is now in the hands of the individual members of the committee for such changes as each may deem necessary. This plan will be reviewed again in the light of the answers received from the questionnaire which is the basis of this report, and the final questionnaire will be in the hands of the high-school principals early in the coming winter.

Thru this preliminary questionnaire the committee hoped to obtain a free and untrammeled expression directly from the men who are out in the field, which would serve as a basis of study, rather than the opinion of the few men who are on the committee.

REPORT ON THE PRELIMINARY QUESTIONNAIRE

The preliminary questionnaire, in addition to the questions, calls for the name and location of the institution, the kind of school, i.e., whether academic, technical, manual-training, commercial, or combined, and the number of each sex enrolled. The questionnaire proper consists of the following three questions:

Question 1. If you were free to organize a high school according to your own ideas, what general plan for organization, either in administration or in program of studies, would you follow? What changes in your own school are necessary to realize this ideal?

Question 2. In the present situation, what obstacles prevent your realization of this ideal?

Question 3. Would you advocate this kind of school for the average community, irrespective of local conditions, or would you so organize the school as to promote the interests of your community? All answers are considered confidential if so desired.

This inquiry was sent to the high schools in all cities of ten thousand population and over. Replies were received from 175 of these schools in time to be used in this report. In most cases the blanks are filled out by the high-school principal, in a few instances by the superintendent. In using the term principal, no discrimination is made between the two. The first two questions are very general and permit much latitude in answering. The number who give similar answers does not show that others would not have agreed, but it simply shows what stands out most prominently in the minds of different men as demanding attention.

I. Of the replies received to Question 1, 162 favor the cosmopolitan high school, 11 the separate specialized schools, and 9 are in favor of modifying the academic course so as to include subjects of a vocational nature which would change them to cosmopolitan high schools. (These are included in the numbers favoring cosmopolitan high schools.) Less than 7 per cent would establish specialized schools.

The following table gives the distribution of the schools according to their enrollment with reference to the kind of school the principals would prefer:

Enrollment of High School	No. of Principals Favoring Cosmopolitan Schools	No. of Principals Favoring Specialized Schools
250 and less	20	1
250– 500	46	1
501– 750	27	2
751–1,000	25	4
1,000–1,500	18	1
1,501–2,000	18	..
2,001–2,500	4	1
2,501 and over	4	1

This table shows that a majority of the principals reporting, of the larger high schools as well as those of the smaller high schools, favors the establishment of the cosmopolitan high school.

The laboratory method of instruction, that is, giving the teacher charge of her classes during the study periods so she can give individual assistance to the pupils that need such help, is advocated by 17 principals. This will require a longer school day and a larger teaching force. A longer school day is favored by 14. Seven of these 14 favor the laboratory method of instruction. The hours most frequently mentioned are from 8:00 A.M. till 5:00 P.M., with the usual intermission at noon.

The organization of the school by departments with department heads is a change that is desired by several. In such cases it is intended that the authority of the principal be increased and that the department head be held responsible for the work that is done in the department.

Among other changes suggested are the part-time courses, the six-year high school beginning with the present seventh grade, the extension of the present curriculum to include the first two years now given in the colleges, segregation of the sexes, arrangement of the program of studies similar to the German plan, i.e., not to have all studies come five times a week for a short period, but some once or twice a week, others three and four times a week thruout the year according to the importance of the subject, parallel courses with no electives, courses with many electives, emphasis on the cultural studies in all courses, emphasis on the vocational studies in all courses, and student control.

The plan of the part-time courses is not to bring the industries into the school but to bring the school into touch with the industries so that the time of apprenticeship will be shortened and the pupil will be ready to meet the situation as it is, when he leaves school.

As to the studies which the different principals would require in all courses, there is considerable uniformity as well as difference in opinion. English, mathematics, science, history, and language are required by most of those who make any specific mention of the studies they would require in all courses. A few would make English the only required subject, more would require only English and mathematics, but the majority who make specific mention of the studies they would require name the general branches just mentioned, but permit election within the departments. In several instances physical training, hygiene, biology, parliamentary law, economics, civil government, logic, ethics, and various vocational studies are required.

II. The answers to Question 2 indicate that the obstacles that prevent the school men from attaining the desired goal are various and many, and in many instances cannot be attributed to any one cause. The leading obstacle mentioned by 73 of the principals is lack of funds. Lack of properly trained teachers, low salaries, lack of room and equipment are among the chief obstacles mentioned, and in most cases can be removed if the proper funds are available.

The lack of funds may be due to several reasons. A community may

be small and compelled to support a larger school than it is able to; it may be a rapidly growing community so that in spite of the fact that new buildings are erected and more teachers are employed the facilities are still inadequate for doing the proper work, as is the case in many of our western cities. The school may not obtain its share of the community funds due to the fact that other municipal matters have been put more plainly before the people and hence have received a part of the support the school should have had, or the board may refuse deliberately to carry out the wishes of the community and deny the necessary funds.

Among the other obstacles mentioned are tradition, lack of knowledge on the part of the community as to what is best, conservatism of the community, college-entrance requirements, poorly trained men as superintendents, lack of knowledge of high-school problems on the part of the superintendent, requirements for high-school graduation, private-school sentiment, conservatism of teachers, politics among the members of the board of education, lack of community interest in its schools, the presence of specialized schools, the requirements of the state department of education, lack of the proper relation and connection with the elementary schools, and the overemphasis of either the vocational or the cultural studies.

It will be noticed that most of these obstacles are to be found outside of the school and that in order to secure the desired change it will be necessary to acquaint the outside interests with the conditions as they are. It is hoped that the answers to the final questionnaire will bring out these considerations.

III. That the school men as a whole are interested and work for the interest of the communities in which they work, is shown by the answers given to Question 3. Ninety would organize their school to promote the interest of the particular community in which they are working. Forty-one would arrange the course of study so as to meet the need of the average community as well as the need of the local community. Only eleven would organize the course of study to meet the need of the average community regardless of local conditions.

The questionnaire incidentally also brings out the lines of work upon which certain schools are laying emphasis and thereby shows a lack of unity as to purpose and content of the high-school curriculum.

To show how some of the principals feel in regard to the situation at the present time, the following statements are interesting. Says one:

> Our educational conferences are held at too high an altitude. Little that they do ever gets down to the voter, who after all decides those educational problems. They, the voters, do not know that we are in session. We need campaigns, with speakers and a publicity bureau that will bring the educational questions right down to the people. They are permitting the best they know and they know no more because we do not have enough political sense to realize that we can get results from the power house.

To those who favor the German trade ideal the following are of interest:

I would not allow temporary demands or even necessities entirely to override the notion of culture. Sickness or old age to a person unused to solace from books becomes a vastly greater burden.

A living may be paramount, a competency may be desirable, but an independent fortune is not a greater necessity than a preparation for a happy and contented period of advanced age. This to my mind is one of the strongest arguments against the abandonment wholly or partially of the culture elements in the curriculum of our secondary schools.

Another lays stress on the quality of the teachers:

Organization will not make an ideal high school. Form but not content, that is the trouble now; a program of studies but no one to teach them. If I had the power to organize a school I would get men and women to teach not what is in some made book, but what they know from life.

Still another says:

When the school properly serves its community, that community will appreciate it and boast of it. Then the other communities will take notice and ask why they may not be thus served. We need a few real, active, peerless pioneers. Progress will follow fast then.

The following received since this report was drafted is of deep interest as it comes from a leading high-school man of the country:

DENVER, COLO., July 5, 1912

Mr. Spencer R. Smith, Principal
Wendell Phillips High School
Chicago, Illinois

MY DEAR SIR: I regret that absence from the city and press of other work made it impossible to reply to your favor regarding cosmopolitan high school before the meeting of the Secondary Department. I am very much in sympathy with the objects of your committee and believe that you have started an important investigation. At a later date I will reply carefully to your preliminary questionnaire.

Very truly yours,

(*Signed*) W. H. SMILEY

I suppose that there is no more difficult question than the question of the relative value of subjects and, for this reason, there is the utmost need of discussion of the question which you propose. I feel more and more the weakness of students who become superficially acquainted with too many subjects to get real growth and power thru increasing clearness of thinking that comes from hard and repeated attacks upon the same subject from many different intellectual angles. Many young teachers and most parents are not going to appreciate this unless those who have the making of school programs are able to rate subjects with justice and give sound pedagogical reasons for the same, thus indicating their convictions as to the relative values of subjects for accomplishing certain specific and definite educational ends. We do not recognize at all clearly, the mass of us teachers, the difference between subjects that are used to secure right moral or æsthetic feeling and those whose purpose it is to give intellectual power.

Within the past year a most important contribution to the study of social problems has been made by Dr. Walter E. Weyl. A close study of his book *The New Democracy* will indicate a necessity for a complete overhauling of the whole of our secondary education. Time will permit of a brief quotation only:

The future education of the masses, however, should not be the traditional Procrustean unrelated and undifferentiated education of yesterday, but an education which fully equips the child for his industrial, political, and social life. For too long the school has been half-asylum, half-penitentiary. For too long it has stood alone in irrelevant isolation, knowing neither factory nor farm, neither kitchen nor voting-booth. For much too long it has been a place where ignorance has taught ignorance, where individuality has been weeded and crushed out. . . . . Our new education . . . . must be an education which will aid society in the conservation of the life and the health of citizens and in their progressive development. It must aid men in their industrial pursuits, in their political activities, and in their private life outside of industry and politics.

Two most important reports have emanated from this city within a few weeks, both sounding a warning to those interested in the education of our boys and girls, and in their preparation for the responsibilities that are to come to them in life.

The first of these reports to reach us is *A Report on Vocational Training in Chicago and in Other Cities*, by a committee of the City Club of Chicago, under the chairmanship of Professor George H. Mead of the University of Chicago. In this report is found the following statement:

Our great contention is that vocational training be introduced into our school system as an essential part of its education, in no illiberal sense and with no intention of separating out a class of workingmen's children who are to receive trade training at the expense of an academic training. . . . . Just as liberal a training can be given in the vocational school as that given in the present academic school. Indeed we feel that the vocational training will be more liberal if its full educational possibilities are worked out. . . . . We again insist that vocational and trade training must appear in the American public school as an essential part of that unique system.

In connection with the above, note a late expression of a layman who has given much attention to the cause of education both in England and America. Mr. Alfred Moseley is quoted by the *Sierra Educational News* as saying:

By no means ever separate the technical school from the so-called classical. The student who emphasizes work in the former must broaden and enrich his life thru contact with the classics and humanities. Likewise he who goes in for the literary, needs just as much the help to come from a first-hand knowledge of the industries. The two lines of work should be carried on in the same institution, not in separate schools. Moreover, labor is lessened thru this plan, with a corresponding saving in time and money.

The second of these reports is *Vocational Education in Europe*, made to the Commercial Club of Chicago by Mr. Edwin G. Cooley, formerly superintendent of schools in Chicago.

Speaking of the problem before the German people of the twentieth century whose rebirth came in the nineteenth century, Mr. Cooley says:

A new education was necessary for a state founded upon these principles, an education based upon the principles of self-activity and self-responsibility, a training for the head, the hand, and the heart, broad system, taking into consideration the needs of all the individuals of the state.

Speaking of Dr. Kerschensteiner's book *Education for Citizenship*, Mr. Cooley continues:

Mere technical training will lead to national selfishness and not to true patriotism. Germany must, therefore, educate the man and the citizen as well as the workman. Both utility and culture must be included in the general schools for the people. Both aims, the cultural and the useful, have their justification; each taken by itself is one-sided and inadequate to meet the demands made upon the modern citizen.

Much is said today of the conservation of our national resources. We think of the physical resources, "our forests, our mines, our fisheries, and our water power," and are ever forgetful of our human resources. Professor Carver of Harvard University, again to quote Mr. Cooley, puts the case in this way:

In the present conservation movement, it is highly important that we realize two things:

1. That our most valuable resources are our people, and
2. That we are wasting people more than anything else.

If we forget either of these things, we shall probably find ourselves trying to save at the spigot while we are wasting at the bunghole.

Above we have had a composite of opinion. The problem is ours. The study proposed by this committee is an attempt at its solution. We cannot more than give the main divisions of the investigation.

It is intended to study:

A. The plant and its maintenance.
   1. Cost of building or buildings.
   2. Equipment—cost of installation and upkeep—character of equipment furnished.
   3. Cost of repairs—to establish comparative cost of repairs and maintenance.
B. Organization.
   1. Teachers, salary, sex, appointment, professional and social betterment.
   2. Pupils—elimination and survival—failure and promotion—intensive study of subjects offered in course of study.
C. Relation of parent to pupil; effect on pupil and curriculum.
   1. Nationality of parents.
   2. Occupation of parents.
D. Medical inspection a factor in school development.
E The high school and the college with a study of activities pursued by high-school graduates who do not continue their studies formally beyond the high school; college influence; examination and certificate systems.
F. High-school control; state, county, city supervision.
G. Self-directed work.
H. Vocational guidance.
I. Study values relative to conditions found in the investigation of preceding studies.

In the pursuance of this study it is proposed to make use of such material as may be on hand, the assistance gained thru the answers given to the questions to be sent out to the principals of the high schools of the country, whose knowledge of the situation is first hand, to discover the needs of our commercial houses, manufacturing concerns, from the management of such, with a view to developing a supply adequate to the demand, not in number, but in required efficiency; not forgetting that the material with which we work is the human being, not a machine, to be conserved

as a citizen of a great commonwealth, as the upbuilder of a home in which culture makes for happiness.

Mr. Marshall in his *Economics*, quoted by Mr. Cooley, says:

> Man's character has been developed thru all the ages by his daily work. Religious ideals, and military and artistic spirit may at times be the most shaping influences, but man's daily work in securing his daily bread has never been displaced from its leading position for any great length of time.

Ruskin and William Morris have blazed the way; idealistic and somewhat utopian, it may be, but it points to a goal which it is hoped the democratic ideal of our modern high school may reach, the close union of culture and technical efficiency adapted to the conditions of the twentieth century.

Respectfully submitted,
For the committee,
SPENCER R. SMITH, *Chairman*

ROUND TABLE CONFERENCES

A. ENGLISH

REPORT OF THE COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS IN ENGLISH

JAMES F. HOSIC, HEAD OF THE DEPARTMENT OF ENGLISH, CHICAGO TEACHERS COLLEGE, CHICAGO, ILL., CHAIRMAN

The Committee on College-Entrance Requirements in English, which was authorized at the Boston meeting in 1910 and continued by the Round Table in 1911, hereby reports that it has in part accomplished its work. In accordance with instructions, we gathered as much information as possible by the middle of January, 1912, and then, thru the courtesy of the *English Journal*, published a report, which was at once placed in the hands of the members of the National Conference on Uniform Entrance Requirements in English. In response to a most cordial invitation from the Executive Committee of the Conference, four members of the committee were delegated to attend the meetings of the Conference and take part in its discussions. At the meeting on February 22 and 23, Messrs. Thomas, Heydrick, Miller, and Hosic were present, and at the meeting of May 30 the first three named were again in attendance. The action of the Conference was distinctly in the direction of greater freedom for the high schools. A summary of the principal changes will be given at the joint conference to follow, under the topic "Progress in Articulating School and College English."

The report of the committee as presented to the Conference, with the omission of certain introductory matters of a historical nature, appears below. It is suggested that the committee be continued and that it be instructed to co-operate with other similar committees in the preparation of a national syllabus.

THE CONSENSUS SO FAR OBTAINED

The committee has received replies to some or all of its questions from over seven hundred persons, acting either as individuals or collectively. The 225 teachers of English in the high schools of New York City, for example, sent a unanimous report condemning

the present requirements and examinations. The English section of the State Teachers Association of Illinois, and the associations in Nevada took similar action. As nearly as can be determined, these persons are identified as follows: high-school teachers, 694; normal-school teachers, 13; teachers of English or of education in the colleges, 20; principals and superintendents in towns and cities, 44; state inspectors and state superintendents of public instruction, 13. The distribution is as follows: New England, 35; Middle States, 282; South, 31; North Central, 295; West, 42. Both larger and smaller public high schools are represented, but, unfortunately, few private schools have been heard from. It is certainly desirable that their views should be known.

As usual, the answers to the questions sent out by the committee fall into three classes, radical, moderate, and conservative. All sections of the country are about equally represented in each class, but the conservatives are greatly outnumbered. Comparatively few say that they consider the influence of the Uniform Requirements entirely helpful. Many are grateful for the emphasis upon English work which the colleges have helped to establish, but most feel that it is time to go forward. With increasing knowledge of the nature of the pupils and of the character of the results actually obtained, the high schools themselves must work out progressive courses in English, wisely adapted to varying needs.

Representative opinions concerning the influence of the requirements upon the course are as follows: "have good influence" (seven schools); "unify the course" (five schools); "give definiteness" (four schools); "set a high standard" (four schools); "determine the course" (six schools—nearly all assume that they do); "force use of unsuitable material, hamper, restrict" (fifty-two schools); "emphasize the unessential," "deadening," "pernicious," "call for memory instead of thinking" (several others). As to the influence upon methods of teaching, about one-fourth of the answers are favorable: "more systematic and thoro," "guide inexperienced teachers," "establish uniformity," "co-ordinate literature and composition" are among the phrases used. Several say that methods are not influenced at all; the large majority find something to deplore. "The requirements prevent freedom and individuality," "hinder adapting the work to the pupils," "cause mechanical work," "overemphasize analysis and collecting of facts at the expense of appreciation and of ethical appeal," "institute cramming for examination, college methods, technical study." It seems evident that a large number of teachers feel the Uniform Requirements to be, for one reason or another, a positive hindrance to effective teaching. As to the influence on the pupils, a respectable minority find it wholesome: "Importance is lent to the work," "the compositions are better," "the reading is better." A few think the influence is confined to the fourth year of the course. A large number can detect no influence, while very many discover "dislike," "indifference," "wrong conception of literature as a mere task," "looking only to getting to college," and "loss of interest on the part of the non-college group." Some complain that the pupils are overburdened, and a number say that the influence of the requirements depends upon the attitude of the teacher.

Six high schools would make no change in the English course if the college requirements were eliminated; they are satisfied with them. One says, "no change for *western* colleges." Several declare that they pay no attention to the requirements. Inspection of their courses shows, however, that they do use most of the books on the list. The main body come out strongly for reform. They urge more composition, especially oral composition, more use of subjects from the life-experiences of the pupils in place of those from books, more emphasis on "fundamentals." The literature course, they say, should be more flexible, better adapted to the needs, interests, and capacities of boys and girls; more modern books should be read; the work should aim at appreciation, not at information and technical analysis in preparation for an examination; the work of the last two years is too abstruse and too exacting; American literature is neglected; there is no progress from year to year. The earnestness of these protests is unmistakable. A large

number of the writers feel and feel deeply the unwisdom of sacrificing the possibilities of growth in taste and in character on the part of boys and girls for the convenience of college examiners, or a mistaken pride in turning out successful candidates. It is difficult to see how tradition, no matter how strongly intrenched, can stand long in the way of reorganization.

Most schools make no distinction between those who are going to college and those who are not, but give the same training in English to all. A few provide special drills in the fourth year to meet college commands, and several schools offer special courses in preparation for business. Very few complain of the influence of a particular college, tho it is evident from the answers that certain higher institutions in various parts of the country do exert a powerful influence on the schools near them.

The aim of the high-school course, as stated in the circular, was pronounced satisfactory by nearly all. A few would add such words as "clearly," "easily," and "effectively" after "express" in the statement concerning grammar and composition, and a much larger number would include "ethical training," "enlarge the view of life," "raise standards of conduct," and similar purposes in the aim of literature.

The answers as to the selection and distribution of literature are exceedingly difficult to summarize. There is no agreement here, and it is evident that the Uniform Requirements have not thrown much light on the problem. The principle most frequently suggested is that the literature should be adapted to the interests and capacities of the pupil and should grow more difficult as he advances. Others would "include a variety of types," "illustrate the development of English literature," "choose representative authors," "illustrate the forms of discourse," "correlate with composition," "cause world classics to be read in school and modern authors outside," "assign certain books for study and others for home reading," "both satisfy tastes and create them." Some would teach American literature in the first two years and English literature in the last two. Others say, "from the objective to the subjective," "story first and subtler poetry and essays last," "follow chronological order," "include a variety of form according to maturity in each year," etc. No doubt there should be considerable flexibility of choice and arrangement, but it is hard to escape the conviction that the high-school course in literature presents an educational question that has not received adequate study from anybody.

There is great difference of opinion also as to the lists. The conservative minority wish them prescribed or partly prescribed and partly advisory. A few suggest the prescription of types. Many choose open lists or no lists at all. But by far the larger number declare for advisory lists arranged by some authoritative body. Almost no one seems to think the present list entirely satisfactory, the principal objection being that the books are not sufficiently varied to meet the needs of all classes. It is urged by some that more modern short stories and more selections by American authors be included. Several find Milton too remote from the interests of their classes. Few definite suggestions are made, however, and it seems evident that little experimental work has been done to determine what books are best suited to high-school pupils.

The majority would retain the distinction between *reading* and *study*, tho it is clear that the question was not understood to refer to the application of these terms which is made by the Uniform Conference. To require both class study and rapid outside reading thruout the four years is apparently the rule. The vote means, then, that most would have both intensive and extensive reading. It may fairly be inferred from the other answers that the majority are opposed to the setting-apart of a few books to be studied in the fourth year in preparation for a college examination.

Nearly all would make provision for the history of literature, but, as already indicated, there is lack of agreement as to what the provision should be. The following suggestions are made: "talks"; "a light requirement"; "a comprehensive glance somewhere in the course"; "distribute thru the four years"; "a separate elective course"; "with a

textbook in a definite course"; "in the second year"; "in the fourth year"; "by periods as a setting for the authors"; "a text with reading of selections"; "in the history course"; "subordinate to the classics." Here is another educational problem for solution.

The test for entrance to college suggested in the circular met with strong approval, except as to "conversing." Several feel that the pupil would be too much embarrassed to do himself justice. A very few prefer examination on prescribed books, and others suggest partial certification. But the overwhelming majority prefer certification to any sort of examination for entrance to college, for the reason that examinations do not examine and that the effect of them upon the schools is bad. With the best intentions in the world, college professors are unable to set examinations adapted to high-school boys and girls, and so long as there are examinations to be passed so long pupils will be coached to pass them, to the infinite detriment of natural, healthy interest in the subject for its own sake.

Many would, under certain conditions, give a high-school diploma to a pupil they would not recommend to college. They propose, however, various methods of guarding the practice, and they would treat such cases as exceptional.

The National Conference on English Requirements should be made up of college and high-school representatives in equal number, say most of the writers. A few add "from all localities." Several declare boldly that the high schools should be free to determine their own courses, and one or two suggest the advisability of including teachers of subjects other than English.

Two additional topics of great importance were brought forward. The first is that of co-operation among all the teachers of a school in securing good English. The other is that of the organization of the elementary course in English and the high-school course in English into one unified, coherent whole. These are subjects to be pressed upon the attention of the National Council of Teachers of English, however, rather than upon that of the National Conference on Uniform Requirements.

A few letters from well-known students of current educational problems will serve to supplement the principal facts set forth above.

Two professors of education write:

I believe that college-entrance requirements in English are having a very definite influence upon the high-school work. The state university requirements in English have entirely remodeled the curriculum of high-school English in this state during the last ten years. I think that as much has been accomplished as is possible by merely stating years and books. The next step that our colleges and normal schools must take is to indicate in much more detail the method of carrying on the work. Many teachers are trying to follow the entrance requirements but are doing it in a mechanical fashion. As a result, many of our boys and girls finish the high school with a repugnance for reading good literature, and with utter inability to write decent English. I receive about two hundred new students each year in my department, and I find many of them very poorly equipped for writing their everyday ideas, and for expressing the ideas with which they deal in my own subject. I presume that they could define figures of speech, write rules for capitalization and punctuation, but when it comes to expressing their ideas in clear terse English many of them utterly fail. They also fail in punctuation.

The failure of pupils to gain a love for good literature is due in a large measure to the lack of adaptation of the reading-matter to the ages and individual aptitude of the different pupils. Most of the English work is in the hands of women, who frequently, very usually, do not understand boy nature. I have one boy in the high school who is deeply interested in mechanics, out-of-door sports, and woodcraft. He draws from our city library and the university library scores of books every year upon those subjects. His teacher of English, a woman, keeps him after school frequently to learn stereotyped definitions of words and figures of speech, and to urge him to learn the traditional literature properly. If she could only meet the boy upon his own footing, she would have no difficulty in enlisting his interest and in securing satisfactory results.

Similar difficulties arise in the composition work. Most of the composition exercises are ill-adapted to the interests and capacities of the children. They are given all sorts of formal composition exercises in which they have little interest, but they are allowed to make slipshod statements in their everyday expressions, and little attention is given to the

composition in the history class, the mathematics class, or the physics class. Why could the composition work not be more closely related to the other subjects? Tons of effort are expended by teachers in trying to make pupils into short-story writers and authors. Much less time and energy spent in helping them to express themselves simply yet accurately on everyday matters would be much more effective.

I am convinced that the teaching of grammar, rhetoric, and composition in the school is too formal; it consists too much in the learning of definitions, rules, and formulae, with illustrations more or less remote from the pupil's interests and everyday expression. The purpose which many instructors seem to keep in mind is to have the pupil acquire a theoretical knowledge in these fields, rather than to have him gain facility in the employment of effective modes of expression. It seems to me that the pupil is required to learn conventional matters rather than to acquire a feeling for the best forms in current usage. The work of the school is too far removed from the actual linguistic needs of everyday life. This results in alienating the affections of many pupils for all work in grammar, rhetoric, and composition. It is probable that the majority of pupils would vote that these were the most distasteful subjects in the whole high-school course.

I do not think that the requirements in English for entrance to college work are entirely responsible for the formal character of instruction in the high school. Undoubtedly they have put a premium upon mere verbal learning, tho I believe there is much less emphasis upon that sort of thing now than there was a few years ago. But even if the colleges would accept anything which the high schools would present, it is probable that the work would still be more or less formal and remote, until instructors gain the view that the object of these branches is not to acquire theoretical knowledge so much as to gain facility in the use of modes of expression that are appropriate to the everyday needs of the pupil. If instructors would be governed by this latter conception, their work would be based less upon formal textbooks than is now the case in most places.

In respect to the teaching of literature I am convinced there is too great formalism here also. According to my observation, pupils are still required to memorize what some analyst or critic says about the character and values of the English classics. It is undoubtedly worth while for high-school students to analyze English masterpieces; but it seems to me to be worthless to memorize what other people say about the qualities of any work or selection which is written. It is probable that if pupils were not examined upon these formal matters, instructors would not feel the necessity of insisting upon them in their teaching.

From the principal of one of the best of the Eastern high schools:

It seems to me that so far as examinations are required by the colleges they should be examinations for power rather than for definite information. I think that the specific nature of college-entrance examinations has greatly hampered the English work in the high school. Instead of testing the pupils as to their ability to read, to write, and to speak good English, the college examinations have emphasized the candidates' information concerning a large number of things that are not essential. They have specified exactly what literature was to be read, and designated so closely just what was to be done with this literature that all individuality has been ground out of the teachers.

If I felt that we could trust the colleges to handle the matter in a common-sense way, I should say that it would be well for them to require an examination testing the pupils' ability to read and interpret English of the grade, say, of Macaulay's *Essays*, or of Tennyson's *Idylls*, or of the less difficult plays of Shakespeare; that they should require the pupil to be able to write an account of his own experiences in straightforward, idiomatic English, practically free from rhetorical and grammatical errors, and that he should be able to carry on an intelligent conversation on the topics of the day without exposing any ridiculous defects in his speech, either in construction or in expression. The colleges, however, are so largely manned by young Ph.D.'s who have taken their degrees on such subjects as the rhythmic recurrence of "or" in Shakespeare's plays of the middle period, that I fear we shall not get any large educational treatment of our pupils from them.

Personally, I think the time is not far distant when the colleges will take graduates from a four years' high-school course on the recommendation of the principal. I should much rather trust the high-school principals than the colleges in these matters, for it will be some time before the colleges get away from the idea that an education means a certain quantum of information in the hierarchy of subjects.

From the superintendent of public instruction in an eastern state:

I have often wondered whether it would be desirable to give separate consideration to the teaching of English as expression and the teaching of English for appreciation—in

other words, composition and literature, including under the first oral expression. I have a conviction that the greatest source of confusion in English teaching at the present time is the attempt to teach largely by the same methods these two different types of work, which, in my estimation, rest on essentially different pedagogical necessities. I would even go so far as to say, as a result of observation, that in the ordinary secondary school and college, separate teachers should, wherever possible, be had for literature on the one hand, considered mainly from the standpoint of appreciation, and formal English, meaning thereby largely expression and analytical study of some literary products, on the other.

From neighboring colleges, also in the East:

Constant agitation of changes in the English entrance requirements tends to cause uncertainty to preparatory school teachers. The new requirements set by the conference of 1909 have not yet gone into effect. Until they receive a fair test it seems inadvisable to reopen the entire subject. The new requirements seem to us sufficiently flexible to meet the demands of teachers for variety.

The oral test suggested in *3a* (3) is impracticable with us, owing to the very large number of candidates examined. To the following question, whether a high-school diploma should be given to a pupil whose deficiencies in English are such as to prevent his being recommended for admission to college, we should answer decidedly, No. We prefer entrance examinations to certification because they seem to us to afford more convincing proof as to the candidate's ability. The recommendation of the preparatory school teachers may be helpful as collateral evidence, but we think a man should be able to meet such college tests as we give. We have for some time been setting some topics of general nature for composition.

The college-entrance requirements in English, as at present administered, do not foster the best kind of English work in the high schools.

1. *a*) They limit the high-school course to readings which may be good for one school, and may be bad for another school with different problems.

b) They inevitably oblige most of the high-school teachers to prepare pupils for examination, rather than to give them the best training. When the uniform entrance requirements were first proposed, nobody expected this result.

c) I believe that most pupils write literary appreciations which they think will be acceptable, rather than their own opinion of the books read.

d) In my judgment the high-school course in English should include English grammar, practical composition work, the history of English literature, and a considerable amount of reading. One of the chief evils of the present system seems to me to be that practically every book put into the hands of the pupil is a textbook. When I first read *Pilgrim's Progress*, I read it as a book, not as a school text, with annotations and questions. I feel sure that the reduction to a school text of every piece of English literature which is put into the hands of a high-school pupil is decidedly injurious to an appreciation of literature.

The methods should be left to the school. Results are all that the colleges ask.

2. *a*) "The whole range of his experience" seems to me unsatisfactory. I remember well that, at the age of sixteen, I had very little experience. I should, nevertheless, have resented certain subjects for composition which I have seen proposed. No boy should be compelled to put on paper his private and personal feelings.

I have no objection to (1) and (2), tho I believe that ability to write is the first requisite.

b) In my opinion, uniform requirements are an absurdity. For examination purposes, the distinction between reading and study should be dropped. I believe that, in teaching literature, some books or essays should be exhaustively studied, and others read for general effect.

Some elementary history of English literature ought to be thoroly mastered. High-school graduates should know the names of our great writers and the names of their principal works.

3. A good composition and a statement of reading done would satisfy me, as an entrance requirement. I do not believe that literary "appreciation" is a proper test. Under the conditions of admission examinations, I do not think that oral tests are fair to the pupils. Nervousness might debar many.

CONCLUSION

It is clear that there is little or no difference of opinion on some of the points involved in the investigation. The lists of books which are published from time to time by the National Conference practically determine the choice of classics for the high-school course.

The use of them varies. The nearer the school to an examining college the more rigidly the teachers adhere to the list and the more technical and detailed is the study required. Schools which send graduates mainly to accrediting institutions, on the other hand frequently regard the lists as merely suggestive and seem to feel free to choose books and adapt teaching to the class in hand. It is the examination, and particularly the kind of examination set, which is objected to by the schools. Many teachers declare a preference for examination as opposed to certification for college entrance, but they almost invariably stipulate that the examination shall be more liberal than at present. It is evident, also, that the emphasis upon literature in the reports of the Conference has circumscribed the composition work of the schools. Many teachers feel that, at present, literary composition receives proportionally too much attention and that the forms of expression in use in daily life, particularly the oral forms, are being neglected. This is due, in part, to the demand for more or less exact knowledge of the form and content of the books prescribed and, in part, to the failure of school authorities to provide adequately, either in teachers or in equipment, for the teaching of composition. It may be necessary to separate the course in composition from the course in literature, as several have suggested, in order to bring about needed reforms.

TOPIC: WAYS AND MEANS OF INCREASING THE EFFECTIVENESS OF INSTRUCTION IN ENGLISH COMPOSITION

A. VOCATIONAL AND MORAL GUIDANCE THRU ENGLISH COMPOSITION IN THE HIGH SCHOOL

JESSE B. DAVIS, PRINCIPAL OF CENTRAL HIGH SCHOOL, GRAND RAPIDS, MICH.

To teach men how they may grow independently and for themselves is, perhaps, the greatest service that one man can do for another.—Jowett.

Every pupil who enters the high school presents himself as a candidate for some successful career in life. He may have little or no conception of what that means, but such is the faith of the pupil and his parents that they expect the school will in some way secure for him the much-coveted prize. That the schools fail to meet this expectation is evident on all sides. A diploma does not necessarily assure one happiness or wealth: all about us are educated misfits—round pegs in square holes. Discouragement, failure, and crime are the natural results of misguided lives. We have failed to teach men how they may grow independently and for themselves toward a successful career in that calling for which they may be best fitted by nature and preparation.

Realizing the need of directing the work of our pupils along this line, a plan for vocational and moral guidance was originated in the Central High School of Grand Rapids, Mich., about four years ago. The word "guidance" has in this connection a special significance. From the vocational point of view, it means the gradual unfolding of the pupil's better understanding of himself; it means the opening of his eyes to the broad field of opportunity in the world; it means a selection and a preparation for his own best field of service as a social being. From the moral standpoint, the idea of "guidance" is peculiarly essential in the development of the pupil. Ethical instruction that merely informs the brain does not necessarily produce better character. It is of most value when it is in some way applied to the actual thinking and acting of the pupil. In this connection guidance means the better understanding of one's own character; it means an awakening of the moral consciousness that will lead the pupil to emulate the character of the good and great who have gone before; it means a conception of oneself as a social being in some future occupation, and from this viewpoint, the appreciation of one's duty and obligation toward his business associates, toward his neighbors, and toward the law.

In our attempt to aid our pupils to choose their course of study with a degree of wisdom, to give an aim and purpose to their work, and to plan definitely for some vocation for which they seemed best fitted, we outlined a plan which we called "vocational guidance." It is not often that, in an attempt to find a solution for one problem, one happens to work out a scheme that proves to be a very satisfactory solution of three perplexing questions. Such, however, was the result in this case, for we found that the plan not only tended to give vocational aim to the high-school course, but, as the work progressed, it developed into a very practical course of moral instruction. Moreover, now that it has been in operation for over three years, we find that it has solved some of the problems of English composition. It is from this point of view that I wish to bring to the attention of teachers of English the opportunity that is theirs, while imparting the technical and literary sides of the subject, to improve their results and at the same time to guide their pupils in a systematic course of instruction that will tend to prevent many misfits in life, and that also may be the means of raising the standard of moral efficiency in the coming generation.

The writing of themes by pupils of secondary-school age is not exceedingly popular, particularly with the red-blooded, matter-of-fact boy. Work for work's sake does not appeal very strongly to him. The average exercise in English composition upon subjects of more or less questionable interest may have its disciplinary value, but it too often lacks the added value of originality or life-interest, and the themes rarely leave a lasting impress upon the writer. Each study in the curriculum of today must meet the demand of a very practical civilization. Its cultural value, while fully recognized and appreciated, is not all-sufficient, but to this must be added a practical motive. English composition is no exception to this rule. It may, however, be given a motive that is in the highest sense practical, by connecting it with the broader purpose of vocational guidance. Our attempt to accomplish this is what I wish to outline in this paper.

In the Central High School of Grand Rapids the course in English continues thruout the entire four years. In each grade and class the work is divided into three parts: viz., grammar or rhetoric, composition, and literature. The exercises in composition are both oral and written. Not less than three, and often more, of these exercises are based upon the work in vocational and moral guidance. Such exercises do not supplant all other theme work, for not more than one-fourth of the time given to composition is usually taken for this study. A general outline by semesters is followed, but each teacher is expected to use her own judgment and originality in carrying out the detail of the plan.

FIRST-YEAR TOPIC: ELEMENTS OF SUCCESS IN LIFE

The work of vocational guidance really begins in the eighth grade with a discussion of the value of an education, the reasons for going to high school, and the choice of a course of study in the high school. However, I shall confine my description to the scheme as carried out in the high school. The topic for the first year or ninth grade is called "Elements of Success in Life." The vocational work of the first semester of this year is devoted to the study of the lives of successful men and women for the purpose of discovering the habits of life and work that have contributed to their success. Lists of these characteristics are made and they form the basis for studying the fundamental elements of success. For the pupil to work out for himself these principles of life from a study of the lives of men of all ages, and as a class exercise to make this deduction from such a comparative study, makes a lasting impression of the eternal verity of human virtue. A comparison of the opportunities and difficulties of these men and women with those of the pupil forms another very beneficial theme. Each teacher that has a real interest in the plan will develop from this suggestion ideas for both the oral and written work.

The second semester of this first year is devoted to self-analysis. "Know thyself"

is the principal theme. This is possibly the most helpful of all the work when handled wisely. The pupil should not be permitted to dwell upon his own weaknesses or faults, but should be guided in finding his strong points. Individual characteristics, such as temperament, likes and dislikes, experience, special aptitudes, etc., should be brought out in confidential papers to be read and discussed in private with the instructor. This gives the teacher a wonderful opportunity to enter into the great work of guiding and molding lives. By being inspired with confidence in his own ability to do and be something worth while, the pupil can be given a new start that will be made evident in all that he does. For class exercise very interesting topics that will help the pupil to gain an estimate of his present worth may be suggested: "How I could earn my living if I left school now"; "Some employments of boys and girls of my own age"; "Personal adventures"; "The business asset of personal appearance, good manners, cheerfulness, etc."

SECOND-YEAR TOPIC: THE WORLD'S WORK

The first semester of the second year or tenth grade is occupied with a survey of the world's work in general. The object of the study is to broaden the pupil's vision of the possible vocations beyond the narrow field of his previous experience. Reports on various occupations for men and for women are read and discussed in class. A card index has been prepared by one class listing about seventeen hundred different vocations. Such a catalog with references and data regarding the status of the particular vocation in the locality is a very valuable adjunct to the school library. Few pupils of high-school age have any conception of the very large field of opportunity that lies before them. It is quite essential that during their high-school course, and before they have gone too far, they should get this wider view of life. By these investigations a fairly good idea can be gained of the desirability or undesirability of certain vocations. Wages, chances for advancement, health conditions, future growth of the business or profession, and other considerations provide an abundance of material for oral composition.

HOW TO CHOOSE A VOCATION

The topic, "How to Choose a Vocation," which is made the basis of the second half of the tenth-grade themes, appeals strongly to the interest of the pupils. By this time all are vitally concerned with the problem. They now need careful guidance in an attempt to narrow down the number of attractive vocations to the one or two fields which their own peculiar fitness seems to indicate are best. Here must be applied all that has been developed before. The pupil must be led to examine himself again as to his natural ability and tastes; he must make a survey of his opportunities and possibilities, and then must make a careful application of these to the call to service. This is the crowning opportunity of the true teacher to reveal to his students some appealing career, some compelling purpose that will be to them what teaching is to him. An appreciation of the great law of service should be made the ideal of the discussion and theme work in this course. By a possible process of elimination the pupil may be led to decide upon some vocation or some special line of future activity for which he is now to make definite preparation.

THIRD-YEAR TOPIC: PREPARATION FOR LIFE'S WORK

The beginning of the third year in the high school is the critical time in the life of every student. It is here that he must know whether he is to elect the subjects that will prepare him to meet the college-entrance requirements, or those that will best fit him for a commercial or industrial career. It is also at this period that a large number drop out because they have no real purpose in attending school and are tempted to take the first apparently good position that offers itself. If the work of the previous semester has been fairly successful it will be evident in the interest with which the pupils undertake to plan the steps by which they may reach the goal of their ambitions. For this

purpose it is quite essential that the school library be well equipped with catalogs of all kinds of schools and colleges, and with such material as may be obtained relating to commercial and industrial conditions.

BUSINESS AND PROFESSIONAL ETHICS

By the last half of the third year the pupil either has chosen a definite vocation or has a general field toward which he is working. He can profitably take time here to consider the ethics of his calling. Interesting debates can be developed out of the problems of modern business methods. Each profession has its peculiar code that should be well understood by those thinking of entering it. The relation of employer and employee, rebating, promoting of stock companies, the moral responsibility of the professional man toward his client, and many other topics will suggest themselves as valuable themes in this grade.

FOURTH-YEAR TOPIC: SOCIAL ETHICS

The individual and society, from the point of view of the chosen or assumed vocation, is the central thought running thru the themes of the first semester of the Senior year. Why should I, the professional or business man, be interested in the public schools, the slums, social settlements, the church, the Y.M.C.A., or other fields of social service? What do I owe to the community in which I live? How can I improve the moral conditions in my neighborhood? Other similar topics will also suggest themselves to the teacher who catches the spirit of the work.

During the second semester the themes take up the relation of the individual to the state from the same vocational point of view. The call for business and professional men in politics, or the "new patriotism" as described by Josiah Strong, sounds the keynote for the discussions. A few suggestive themes will indicate the trend of the written work as follows:

My profession or my business and the law; The effect of a well-governed city upon business; Why should I be willing to pay taxes? What is meant by the "patriotism of peace"?

This plan gives a concreteness to the discussion of social ethics that is very desirable. The impression is lasting and it is personal in its application.

This brief description of the course in vocational and moral guidance is but an outline of the portion of the scheme applied to the department of English. Other departments are co-operating where possible, and the teachers known as grade principals or session-room teachers are trained advisers in the work of vocational counseling. The principal of the school is the chief counselor, and a vocational bureau of business men complete the broader plan.

To give any tangible report of the results of our four years of effort in this work is very difficult. They are more intellectual and spiritual than material and cannot be estimated by statistics. We no longer consider vocational guidance as an experiment but as an established part of the curriculum. One must mingle with the pupils and teachers to appreciate the spirit of the institution. The work has at least eliminated a large proportion of the drifters who were the troublesome element in the school; it has reduced discipline to an almost negligible quantity. While each pupil may not have chosen a definite career, he is at least taking life more seriously; he is making the attempt to find that thing which he must do if he is to fulfill his ideals.

TESTIMONY OF PUPILS

In order that I might bring you the testimony of the pupils themselves who have just completed the course, I asked them to answer briefly and frankly the question: "How has this vocational study helped you?" They were assured that there was nothing personal to me in the question and that all that I desired was a truthful statement of

the impression that they had received from the work. A few characteristic replies will indicate the general attitude:

It broadened my view of the things that I could do in the world.
It has made me realize the need of planning for a career.
It has aided me chiefly in showing me what I ought not to do.
It has given me a working plan for my daily tasks.

From the moral standpoint the following replies are significant:

It has kept the thought of what I was to do when I finished school constantly before me, and I have studied harder and with greater purpose.

The character study helped me most, as I realize that there are changes in my character that I must try to make.

That I must work harder to measure up to those who have gone before.

Never having had to think of earning my own living, I had not thought much about vocations; but when compelled to write on one, I began to think, and I realized how little I was equal to doing anything. I am seeing life in a different light now, and I am more considerate of others because I can put myself in their places.

TESTIMONY OF TEACHERS OF ENGLISH

The twelve teachers of English in the Central High School of Grand Rapids are enthusiastic over the results of the work in their classes. From their reports I have selected a few statements as to the effect upon the work in composition:

The vocational themes insure originality of composition and provide subjects of vital everyday interest.

The students now feel that the study of English is of practical value.

The pupils enter the advanced classes with an uncommon interest and earnestness of spirit.

The themes are well adapted to the various forms of composition and we have seemed to get much more out of them than ever before.

The opinion of the teachers regarding the vocational value of the themes is indicated in the following expressions:

It has undoubtedly prevented some misfits in the choice of vocations.
It has stopped several of my pupils who were drifting.

Even tho it may not determine a pupil's actual vocation, it adds inestimably to his outlook on life and his attitude toward work, and makes for bigger and better lives.

The moral sentiment can hardly be separated from the vocational. Each teacher is very positive of the ethical value of both the oral and written themes. They report:

That it gives an opportunity to use the pupil's ambition as a lever to lift him away from harmful habits and to strengthen his character.

That the pupils appreciate the fact that character counts in practical life.

That they give evidence of a higher sense of honor, a finer feeling for others, and a better understanding of what is necessary to make good.

Perhaps the one bit of testimony that expresses more than all the rest is this:

It makes the teacher feel that she is doing more than teaching English; that she is having a share in the wonderful work of molding lives.

This last statement sounds the keynote of the entire plan. The demand for a practical course of moral instruction in the public schools and particularly in the high school has been urgent for many years. It is not effective when taught as a course in formal ethics; it fails to reach those who need it most when made elective; it is not personal or practical when taught in the abstract; and it does not give time for growth when given as a single-semester course. Thru four years of composition work in the department of English, all of these difficulties are surmounted, and furthermore, the pupils are getting the moral training, not as such, but as a part of a practical preparation for life. With the wide choice of subjects in the cosmopolitan high school, with the diversity of entrance requirements for technical schools and colleges, and with the need of a closer relationship between the public schools and the commercial and industrial

community that supports them, comes this most positive demand. We are called upon to guide and prepare those who are to go out into the numerous ways in life in a manner that will eliminate the misfits and that will make for greater efficiency in every vocation. In no department of the high school nor by any other means can these most vital problems be so satisfactorily solved as in the department of English, the great backbone of the American high-school curriculum. And best of all, in rendering this noble service, there comes in return the well-deserved reward of increased efficiency in the department itself.

B 1. ORAL THEMES

ELEANOR SHELDON, INSTRUCTOR IN ENGLISH, STATE NORMAL SCHOOL, OSHKOSH, WIS.

When I accepted the invitation of your chairman to speak before the English Round Table of the National Education Association on the subject of oral themes, it was with the emphatic and sincere assurance that I knew nothing about the subject except what I had learned thru practical experience in my English composition classes at the Oshkosh State Normal School. I cannot speak of theory at all; of what is being done elsewhere, I know only in a general way; I may tell you the veriest commonplaces of oral theme work, things that you already know; if so I ask your indulgence. I ask your indulgence, too, for the personal note which may be present. I speak only from my own experience, and "I" and "we" may frequently recur in the course of the remarks.

The work in oral themes, as it has developed in the Oshkosh Normal School, is entirely independent of the regular public-speaking courses. It was undertaken in an effort to overcome the bad speech habits of the students. In this it was more successful than any other device tried. Gradually, however, I became convinced that some of the ends usually sought by means of written composition could be attained by means of oral compositions, and that this could be accomplished by a much smaller expenditure of drudgery than the same amount of written work would require. Further trial fully justified the belief, and oral themes have become an important and regular part of the composition work.

In the full development of the system—but perhaps I ought not to call the work a system for it is more like a series of classroom devices—oral themes were called for at stated intervals, usually once a week. The assignment was in exact correspondence with the work being done in written themes and in class study. For example, at the beginning of the course when the class was studying in the textbook the principles which govern the construction of an expository paragraph, when the reading consisted of analyzing model paragraphs, and the assignment in written work involved practice in building such paragraphs, the oral themes asked for paragraphs of exposition. When the class studied narrative, the oral themes consisted of brief incidents or longer adventures. The length of the themes varied from three to eight minutes.

In the beginning the students are advised to write out the theme, following a carefully prepared outline; then to endeavor to talk the theme, using the outline to assist the memory. They repeat the theme thus two or three times before coming to class. When they recite, they are allowed to use the outline, but in order to insure its brevity, they must use a slip of paper no larger than a visiting card.

The audience is held responsible for a full criticism of the performance. For this purpose, the students come to class armed with paper and pencil and take notes thruout the recitation.

The system, when used in conjunction with and as a supplement to written themes, seems to me to possess certain advantages and to achieve definite results. In the first place, it is an excellent means of overcoming bad speech habits; it has many advantages for criticism; it furnishes an excellent opportunity to emphasize structure, and to develop the very desirable but rare quality of interest. These are the very objects sought in

written composition. If they can be attained by means of oral compositions, and it will be my effort to show that they can, the economy of time and effort is at once apparent.

Every teacher of English composition is familiar with the student who knows all the principal parts of the verbs perfectly, who is entirely aware that "had ought" won't do, yet when he opens his mouth to speak, "he done it" and "had ought" come forth with perfect naturalness. The only hope for such a student is to educate his ear. Not until the sound of bad English is shocking, does the tongue overcome its habits. There are students in every class who are sensitive to these mistakes. If they are listening, pencil in hand, ready to jot down material for the criticism they are to be called upon to make, their alertness is gradually communicated to the others. The mere fact that three or four students in a class of twenty begin to take notes warns the others and the speaker that something is wrong. Naturally this disconcerts the speaker, but on the whole his discomfiture is a good thing. He is made uncomfortable by his mistakes, and presently his own ear anticipates the accusing pencils of his audience. He corrects himself hurriedly, hoping to forestall criticism. As the work progresses, the ears of the class become more sensitive and mistakes less frequent. The teacher then warns the students that the obvious jotting-down of mistakes is liable to be confusing to the speaker. The accusing pencil then gives way to the shocked look, and the same end is gained. When a gross error is made the whole class feels it. There are knowing glances. Here and there a student will begin to take notes and check himself. The class is conscious of the fact that something is wrong.

The sensitive ear thus being developed on oral theme days does not remain inactive during the other sessions of the class. There is a sense of real irritation when mistakes are made in the general recitation. Naturally, since the millennium has not arrived, the drill of a twenty weeks' course in composition does not overcome all the bad habits of years, but the oral theme work accomplishes more than any other device tried. When the process of improvement is once started, the students take a lively interest in carrying it on. In some very bad cases, I have called in the assistance of room-mates or friends. They have acted as censors outside the classroom. Some of the most eager students have made the formation of good speech habits a sort of game. At the end of the week the person having the largest list of offenses is required to pay some kind of a forfeit imposed by the person with the cleanest record. The teacher is often asked to arbitrate in these pleasant contests.

Oral themes possess many advantages for criticism. The first and by far the most important is that the teacher's comment is given immediately. Every teacher is familiar with the fact that a keener interest is displayed in the criticism of themes which are returned the very day after being handed in. The exigencies of teaching frequently make such a return of themes impossible. In oral themes the criticism is not only invariably immediate, but it is much more immediate than the comment on written themes can ever be. It is given directly after the theme, when the student's interest in his performance is at its height. Then he is most anxious to know wherein he has succeeded and how he has fallen short.

Not only is the criticism immediate, but every member of the class is benefited by it. The written comment, which every teacher tries to make helpful and stimulating as well as full of warning, reaches but one student, no matter how excellent it is. The criticism given to an oral theme loses none of its intimacy, rather it gains intimacy since critic and student are face to face, and yet it is given to the whole class. The students have heard the theme, they have been asked to express their opinion of it, and have listened to the opinions of their classmates. Normal-school students are especially anxious to know standards for judging. They listen eagerly to the teacher's summary of the criticism and often stop at the desk after class to discuss further some point just touched on.

Another advantage that may be found in oral themes is the possibility for helpful emphasis upon structure. Such an emphasis is highly necessary in my work. The

students come away from their high-school English regarding an outline as a fetish to whose worship composition teachers are hopelessly addicted. The relation between the fundamental mental processes, between clear logical thinking and an outline, has apparently never occurred to them. That structure could be emphasized in oral work was a surprise to me. Most composition teachers feel that the stringy sentence and the rambling, paragraphless mass are the special bane of oral expression. However, the "*so* habit" and the "*and* habit," two bugbears that are largely responsible for the stringy sentence, can be detected and corrected under the same system that eliminates the "he don'ts" and the "you was-es." Strong, well-knit sentences do not become a habit except thru much drill, both oral and written, but here, as elsewhere, the oral theme furnishes an effective and economical means of accomplishing some of the necessary drill.

In the larger units, the paragraph and the composition as a whole, the structure in spoken discourse is somewhat more difficult to master than in written. The very paragraph indentation, which warns the eye that the discussion of one division of the thought has been completed, and that a new one is to be taken up, is in itself a great help in making the outline clear. Quotations and conversation are indicated to the eye. These visual aids to structure being lacking, the student must enumerate clearly the topics to be discussed, he must emphasize transitions and summarize frequently. The necessity for this keeps his mind fastened upon the structure of the piece, upon its skeleton.

He is allowed to speak from notes and is directed to make these notes a brief but clear outline of his theme. The student who criticizes is expected to analyze the composition, telling the number of paragraphs and the topic statements of each. The giving of each theme thus becomes a double exercise in structure. The speaker goes thru the synthetic process of building up a composition upon the outline in hand, and each student analyzes the theme as it is given. When the class fails to understand the plan, the speaker is asked to put his notes upon the board, and a special diagnosis is made. In almost every case the trouble is found to rest in the outline itself. It pretends to be an outline, but it is not. Instead it is a series of jottings planned to jog a treacherous memory. The result of the examination is not only to show up the defects in one piece of work, but also to emphasize the essential relation between clear thinking and an outline.

Having aroused the interest of the students in spoken discourse, it became possible to extend analysis beyond the classroom. The day after Jacob Riis had spoken in the town, there were half a dozen students in each of my classes who were anxious to discuss the plan of his speech. After hearing Woodrow Wilson in a neighboring town, one student gave an excellent analysis of Mr. Wilson's speech and compared his general thoughts to the similar ideas advanced by Samuel Crothers in an *Atlantic* essay which the class had analyzed. Frequently the students have naïvely remarked that they found it much easier to remember a speech if they listened analytically.

I have also found oral themes helpful in developing the quality of interest. Students seem to be sensitive about boring their classmates when they are perfectly willing to inflict deadly dullness upon the teacher. It is no longer necessary to beg the students to imagine an audience which must be enlightened, convinced, or entertained. The audience is there in a receptive mood. The speaker is stimulated and pleased by the signs of good attention. He discovers that the immediate, the personal, and the concrete make better subject-matter than the far away. When oral themes dealing with current events were assigned a day after Theodore Roosevelt had announced that his hat was in the ring, it was a dull student who did not see the superiority of a discussion of the reply to the governors and the third term as compared with a detailed account of the ravages of the sleeping-sickness in Africa. The student can see the value of a concrete term, of a touch of fantasy, or of a bit of sparkle.

These things I have found it possible to accomplish by means of oral themes, and the students have liked the work. Most of them agree that the assignment was the hardest

one of the week, but the personal element involved, the feeling that the work was vitally connected with everyday life, more than compensated for the extra effort necessary.

Toward the end of the term, by way of relaxation, I assigned the preparation of a toast for the oral theme day. In two of the classes, the lesson was prepared in a way that showed real enthusiasm for the work. The students chose a toastmaster and gave a unified toast program centering about some fictitious event in school life which would have been worthy of such a celebration. The students were delighted with the lesson, and the toasts, when one considered the limited background and lack of worldly experience of the students, were remarkably bright and apropos.

B 2. AN ATTEMPT TO MAKE ORAL COMPOSITION EFFECTIVE

MARY E. COURTENAY, TEACHER OF ENGLISH AND ORAL EXPRESSION, ENGLEWOOD HIGH SCHOOL, CHICAGO, ILL.

In these days of purposeful education, of manual training, household arts, domestic science, and vocational courses, perhaps no subject in our high-school curriculum is of more practical value to the individual student than oral composition. This is one study for which the teacher has little difficulty in creating the situation or discovering a purpose, for every hour in the day is a suitable opportunity for speech, and every interest and activity of the pupil calls for it. Whether he be on the playground, or in the classroom, or at the club, or in his home, or in the shop, or in the office, he must know how to deal effectively with his fellows thru the medium of speech. Whether our boys be preparing to plead cases in our law courts, to preach from our pulpits, to practice medicine, to deal in real estate, to sell goods over the counter, or to nominate a presidential candidate at a political convention, they must know how to speak. Whether our girls be expecting to teach in our schools, to occupy a position in an office, to sell hats and dress goods, or to take their place in the home and in society, they must know how to speak. And yet for years we have been training our boys and girls to read, and write, and cipher, to draw, and to construct, to analyze, and criticize, and philosophize, and have somehow imagined that "just speaking" would take care of itself. Since "just speaking" forms so important a part of all the rest of our lives, it would seem that it should form an important part of our school curriculum.

It is this very real and natural basis of oral composition that I like to suggest first of all to my classes, and that I try to keep constantly before them. I find that many of them come to the oral expression classroom with the idea that this is a sort of private hothouse in the great educational conservatory where a specialty is made of such rare species as good composition, clear speaking, distinct enunciation, and direct dealing with a group of listeners—things which apparently have little connection with the rest of their lives. I generally spend the first class hour in developing with them the idea that this is but a special practice period in which we attempt to build up and strengthen that for which they find constant demand, the expression of self, the revealing of that personality which all the rest of their study and experience is developing. Thus we discover that the special report which one pupil has given in the history class, the story which another has related for the entertainment of the English class, the explanation of an experiment performed in the science laboratory, and even the demonstration of a proposition in geometry are all exercises in oral composition.

When we have established this real and natural basis of work, the next problem which arises is how to get effective results. Is there any system, any code of principles —aside from the correction of a faulty sentence or an ungrammatical phrase—which we may apply to the work? Let us return to our practical basis of gaining practical results. I find that the first thing of which my students need to be made conscious is

the objective nature of this work, the fact that they are immediately concerned with something outside of themselves, a group of listeners, whether it number one, ten, or fifty, and that the ultimate success of their speech depends upon how effectively they reach that audience in whatever way they propose. If the pupil fails to make his listeners understand the thing which he is trying to explain to them, feel the thing which he is endeavoring to impress upon them, believe the thing of which he is attempting to convince them, do the thing of which he is anxious to persuade them, or enjoy the story or experience by which he hopes to entertain them, he has failed to accomplish his purpose and his composition is not effective, however clear and logical his sentences, or however eloquent his diction.

By setting up this definite aim, this working-out of a given purpose, we at once establish a standard of judgment and a working basis of criticism. Since the class themselves are the test, they can readily determine to what extent the speaker has been successful and quickly point out the weak spots in his speech. Moreover, I have found, as many others have testified, that the criticism of the class is often far more impressive than that of the teacher. Johnnie may submit to my judgment, and respectfully accept my statement that his speech lacks force or his explanation was not clear; but these same facts assume a reality and added pointedness when his friend in the back row frankly declares, "The speaker didn't seem to care whether we got what he said or not, and I didn't get half of it"; or when he confronts a storm of protests and demands, as: "What does electroplating mean?" "What is a galvanic cell?" "Where was that battery supposed to be?" By this rapid fire of question and criticism we also avoid the evil of flagging attention and interest which often accompanies work that is largely individual, for the problem of the speaker becomes the problem of the class.

An illustration out of my own classroom may make this clear. Early last semester I gave the following assignment to a group of Sophomore boys and girls: I asked them to prepare a three-minute piece of oral composition whose purpose should be explanation. They might explain for us anything they had seen or made, or any process with which they were familiar. When I called upon one boy, he rose to his feet with a readiness which generally bespeaks preparation, went down to the front of the room, and gave us, in clear, easy sentences, the explanation of a little mechanical device which he himself had invented and constructed. When he had finished and returned to his seat with the sense of a task well done, I turned to the class and said, "That was a piece of explanation. How many of you understand perfectly the device which the speaker has described?" Two pupils raised their hands, both boys. One of them soon confessed that he had had a part in the experiment, so we eliminated his judgment as being prejudiced. Then I turned to the speaker. "Well," I said, "you do not seem to have gained very satisfactory results." The boy looked decidedly puzzled, and he answered, "I have told you all the parts, and how they were put together, and what it was for. I do not see what more I could do." Again I referred the matter to the class, and he was confronted with a sea of waving hands and vigorous protest. "I do not know what this means," and, "I do not know what that means," and, "I never heard that word before." The speaker saw at once that he had been using a technical vocabulary which was beyond the limited experience of his listeners. "Well," he said, "I can define the terms"; and he proceeded to restate them in simple words with which we were familiar. This helped a great deal, but there were still some puzzled expressions and puckered brows. The stumbling-block in the way of our understanding was the propelling power of the little device, a construction of cross blades that revolved with rotary motion. The boy decided that if he could make a diagram he might be able to make this clear. We cheerfully offered him the hospitality of the blackboard and the chalk, and he made his sketch. This was a decided help, but still a few remained obstinately perplexed. By this time the speaker was becoming desperate, and likewise determined to solve his own problem. After a minute's thought he exclaimed, "Well, you have all seen an electric fan in a drug-store

or a theater, or a hotel!" We heaved a sigh of relief. Yes, we had all seen an electric fan, and from that time on the explanation was clear sailing. We had pointed out to the boy and demonstrated to the rest of the class the most important psychological principle in the whole field of effective speaking—the necessity of getting directly within the scope of the experience of one's listeners, of comparing the unknown to the known, of gaining acceptance for the new by likening it to that which is already accepted.

Let me cite another instance to show the application of this principle to a different situation. For some years we have had no school paper in our high school. Last year a group of enthusiastic and energetic lads decided to establish one, and a few weeks before the appearance of the first issue one of them asked permission to make an announcement in my division room. I gladly acquiesced, and his announcement was something like this:

It's a long time since we've had a paper in this school. Every big high school in the city has a school paper, and we ought to have one. Now, a bunch of us fellows are starting one, but we can't keep it goin' unless you help. The paper can't live without support, and it is up to you to support it. Now I'm goin' to put a subscription list on the wall, and I want everyone in this room to sign it.

He pinned his sheet to the wall, and there it hung, blankly expectant, for several days. At the end of the week I met the same boy in a class, and I casually inquired as to the success of his enterprise. He confessed that he had not been as successful as he had hoped: the subscription list was not filling up very rapidly, and he did not believe the students were very enthusiastic over the school paper. Then, with perfect frankness, we laid his problem on the dissection table for the diagnosis of the class. His purpose was obvious: he was attempting to get action, to persuade those to whom he spoke to add their names to the list. Thru a series of questions and suggestions we discovered that the fault lay, not in the students or their lack of enthusiasm over a school publication, but rather in his own failure to appeal to their tastes and interests. As one boy aptly put it:

He spoke a great deal about the paper needing them, but he didn't say a word about their needing the paper. It seems to me if I was going to buy a thing I'd want to know what I was going to get out of it.

We further found that there was not a pupil in the school for whom the paper had not some special interest. There was the athletic page with its schedule and reports of games and events; the society column; the column of student activities, with the bulletin of class and club affairs; the personal column; the joke column; and the possible publication of original essays, stories, and poems. When we had completed our discussion the speaker asked the privilege of repeating his announcement the following morning. And he did—with such directness and force of appeal that at the end of five minutes he had more than twenty names on his subscription list.

This was an ideal, tho not unusual, exercise in oral composition. The boy's own experience called for it: it rose out of his immediate needs. Moreover, he had a practical method of measuring his results and proving the principles which we had been working out and illustrating in the classroom.

We must not think, however, that when we have taught the boy the purpose of his speech, to state it clearly for himself that he may know whither he is steering, and to keep constantly in mind his listeners and the limited scope of their experience, we have taught him to present his thoughts effectively to other people. He may still lack the power of development, the ability to amplify his thought and drive it home with sufficient force to achieve his purpose. His speech may be suggestive, but fragmentary and therefore not convincing. He may state clearly that which he wishes you to believe, find two or three good reasons why you should believe it, string these together, and think he has done an effective piece of work along the lines of belief. He may gain passive consent, or fail to arouse opposition, but such a speech will not overcome opposition or produce

vigorous belief. He needs to be taught the necessity of restating his thought in other words, that every one of his listeners may be assured of that which he is going on to prove or explain. He needs to be shown the importance of the specific instance, the significance of the definite illustration in supporting his statements. He needs to appreciate the value of testimony, of quoting someone whose authority in this case carries more weight than his own.

Let me fall back on Johnnie again for an illustration. He comes to class to convince us that the school is in need of a new manual-training shop, and he proceeds in this manner:

> We need a new manual-training shop in our school, because the present one is too small and too poorly equipped to allow of good work. The room in which we work is not suited for manual training. Everyone who wants to take this study cannot, because the classes are too crowded. We haven't tools enough with which to work. The instructor does not get round often enough to supervise what we are doing. We are not doing as much as other schools are, and I think we ought to have a new shop.

Obviously, Johnnie knows the purpose of his speech, and he has selected some good material for his accomplishment, but he has not developed and supported his statements sufficiently to make them really effective. Gradually we draw out of his own experience the following facts: The room is unsuitable, because it is located in the basement. The windows are too high and too small, and do not give proper light. The pipes that heat the rest of the building pass thru it: as a consequence it is always too damp and, generally, too hot. Tables that should accommodate four boys are made to accommodate six, and the consequent jostling of elbows and rulers interferes with or spoils good work. Johnnie remembers here how the chart which he made so accurately and painstakingly was ruined just at the time of its completion by a catastrophe with an ink bottle, caused by the sudden movement of his neighbor's elbow. He remembers too that he had to wait so long for the tools he needed in order to finish the tabouret he was working on before Christmas, that he finally gave up in despair, took it home, finished it up hastily, and, as a result, it has never been what it was intended to be. He cites the repeated statements of his instructor, that much valuable and interesting work has had to be omitted from the course because of the lack of proper space and equipment. When he has brought this wealth of amplification of specific instances and definite facts to bear upon his statements, we are ready to agree with Johnnie that the school is in need of a new shop, and he has learned that one must not only present good reasons for belief, but support them sufficiently to convince one's listeners of their truth. Moreover, this critical attitude which he has established toward his own work he will readily transfer to what he sees; and many a local celebrity who addresses a school assembly, and whose speech is poorly developed and is beyond the interest and experience of his listeners, is subjected to rigid criticism by his youthful hearers.

A college professor recently said: "Give a boy good training in oral composition, and you have given him a liberal education." And surely it is a comprehensive field, full of possibilities of growth and helpfulness. Does it not demand training in keen observation, clear thinking, and sound judgment in the collection of material for a given purpose, the selection of that which is most effective with relation to a definite situation and a particular audience, and the organization of the material selected into a unified, logical, and effective whole—virtues which the public have long deposited in the credit column of the sciences? Are not we, as teachers of English, just beginning to realize the scope, and the importance, and the possibilities of this great field of work? Let us unite our efforts in applying to the everyday needs and experiences of our pupils, thruout the whole routine of work and play, that practical help which is offered in a sound and live teaching of oral composition.

I would refer those who are interested in this subject to Professor Phillips' *Effective Speaking*, a textbook which is used widely thruout the colleges of our country, and which

has recently been adopted in several of our high schools. The principles which I have found most effective for use in my classroom are well set forth here and will, I am sure, prove a source of help to those desiring further information.

B. ANCIENT LANGUAGES

A PLAN TO REDUCE FAILURES IN LATIN

ARTHUR S. CHENOWETH, OAK PARK AND RIVER FOREST TOWNSHIP HIGH SCHOOL, OAK PARK, ILL.

It is the purpose of this paper to suggest a plan which will provide for and save some of those students who now constitute the "wreckage" in Latin.

A teacher often hesitates to decide whether a certain boy or girl has "failed" or "passed" in the year's work. In the present discussion let us apply the word *fail* to all those who do not prove to the teacher's satisfaction that they possess a knowledge of the language sufficient for the needs of the class, and that they will carry away from the classroom some little understanding and appreciation of Latin literature. The boy who, at the end of the year after barely passing, throws away his Cicero with a "Thank Heaven! I won't need you any more," has failed in Latin. And so has the boy who names his new motor boat "Brutus," when he discovers by mere accident that a certain Brutus killed Caesar.

What is the point of view of such students? Many of them took Latin against their will, they got a poor start in the first year's work, and now they do not understand what it is all about. They do not know their forms, they guess at constructions, they translate, if at all, with the aid of a "pony"—they hate Latin and will bring up their children to hate it and avoid it.

The causes of failures in Latin are numerous: a bad start, insufficient preparation in English, laziness, lack of encouragement at home, a poor teacher, ill-health, etc. But whatever the reason of their inability to do as well as the others in the class, these boys and girls are deriving little benefit from the study of Latin. Some of them are painfully conscious of their inferiority and do their best to succeed; others boast that they are going to "flunk." All, nevertheless, deserve consideration—it is our duty to devise some scheme which will save them.

The problem, then, is to secure for the weak students more of the benefits which accrue to the strong from the study of Latin, without lowering the standard. The plan about to be suggested is not new in that it involves the formation of a separate class. Its chief feature is the adoption of a separate course of study.

It is not proposed to interfere with the first year's work, Latin I, as now taught. At the end of the year, however, two classes are organized: first the regular Caesar class (let us call it Latin II A); second, a special class for those who have less than average ability—Latin II B. Again, at the end of the second year, those students who have done well in Latin II A pass into Latin III A, the regular Cicero course; the others who take Latin during their third year enter Latin III B. Similarly we have *two* fourth-year classes—Latin IV A and Latin IV B.

We have thus established three new classes, or rather courses, in the second, third, and fourth years along side of the courses already existing. Let us examine each.

In Latin II B a thoro review of forms and syntax is essential and this is accomplished in connection with the translation work in Caesar. Very short easy passages are assigned, which are explained and reviewed until every student clearly understands them. A part of each recitation period is devoted to a discussion of general topics, so that the pupils gradually become familiar with Caesar's place in history and in literature. The amount

of Latin read depends on the ability of the class. The teacher reads and explains many chapters and the students are held responsible for the subject-matter of all the work covered in this way. Some time during the year two or three weeks are given over to reading selections from Ovid, affording an introduction to poetry and mythology which forms a pleasant break in the year's work. The chief merit of the course lies in the fact that the teacher is at liberty to proceed as slowly as is necessary. A definite goal is aimed at and attained, since a single sentence or paragraph may be dwelt on for days until even the poorest student in the class really masters it.

Latin III B is a similar course based on Cicero. Forms are again carefully reviewed in connection with short passages assigned for translation. Great accuracy is demanded on the review lessons and no chapter is left before it is mastered. Part of each period is devoted to a discussion of the many topics of interest with which Cicero abounds, the purpose being not only to acquaint the student with the orator's importance in history and in literature, but also to train him to see the similarity between our own political institutions and conditions and those of the Roman Republic. During the spring Ovid is taken up for two or three weeks, when an effort is made to arouse interest in Latin poetry. The amount of Cicero read during the year is small, but the teacher reads several orations to the class and a summary of all the orations is kept in a notebook by each student.

Latin IV B is based on Vergil. The work begins with another review of forms. Only selections are read by the class, but the teacher translates the other parts and insists on a coherent knowledge of the whole Aeneas story, together with ability to comment on the more important mythological references. An attempt is made to bring Latin poetry into close touch with English poetry by calling attention to the parallel passages. Moreover, during the latter part of the year for one month at least, a brief introduction to the greater names in Latin literature is given and a few interesting quotations are cited from each author. It is hoped that this will lead at least a few students to read for themselves some of the masterpieces in ancient and modern literature.

In each of the three courses, Latin II B, Latin III B, and Latin IV B, prose work based on the text is given at regular intervals. Each student also is required to keep a notebook which contains a summary of all that is read during the year, together with assigned topics and notes given by the teacher.

The plan for the new courses as here briefly outlined is not intended to be final or rigid. Each teacher must improve it for himself and adapt it to the needs of his particular class. Various changes are possible. For example, it may be found wise to divide the beginning class during the year and establish a Latin I B. Again, there may be no demand for a Latin IV B class.

Perhaps the first objection that will be raised is that the colleges will not recognize such courses toward admission. It must be remembered, however, that the students in these classes are not preparing for college—from the high school they go forth into the business world. If a student in Latin III B suddenly decides that he wants to go to college, he can receive credit for the regular course by making up the required work which has been omitted. But the courses are intended primarily for those who do not and should not plan to take advanced studies. The high schools will give full credit for these courses, and it is quite certain that the colleges will accept them when convinced that the students are deriving real benefit.

Well then, you say, new teachers will be necessary. The objection holds true in small high schools where there is only one Latin teacher, but here perhaps the need of this suggested change is felt least. In larger schools where there are several instructors in the Latin department no increase is necessary in the number either of teachers or classes. One of the old Latin II classes is transformed into Latin II B and the students are rearranged according to their ability.

This rearrangement may appear to involve serious difficulties. Those students who desire to take the regular work must be permitted to do so if they show sufficient ability.

A certain number, of course, will have to be transferred from Latin II A to Latin II B during the year. Such problems, however, can be solved in a manner satisfactory to all by an experienced and sympathetic teacher.

It may be objected that students capable of taking Latin II A will enter Latin II B on the assumption that the latter is a "snap" course. Latin II B does not require as much translating as the regular Caesar course, but it does require a carefully kept notebook, so that in general it will be found to demand as much time for preparation as Latin II A. The three courses are intended to run parallel with the courses now existing. It is hardly necessary to point out that the regular classes will be much improved when the weaker students are withdrawn. The standard of each class will be higher, the work more interesting for students and teacher alike. Again, a boy who has sufficient ability to remain in Latin III A will not be so lazy as to be demoted to Latin III B. Yet at the same time the students in Latin III B will look upon that as a distinct course and one which is better adapted to their needs than the regular Cicero course.

No change in textbooks is called for. The ordinary editions of Caesar, Cicero, and Vergil contain material for most of the work of the three courses as outlined, provided they are in the hands of a capable teacher. Selections from Ovid are to be had at small cost. The school library contains valuable reference books. Any teacher who deserves the name and has any real love of the Muses easily can add the rest.

To sum up, it is proposed to establish three new courses for those boys and girls who for one reason or another at present derive little benefit from the study of Latin. The main features of these courses are:

I. A small amount of Latin is read and the teacher is free to proceed as slowly as necessary.

II. The forms and constructions in common use are taught by patient daily drill.

III. All the students attain a fair degree of skill in translating.

IV. Each course is made interesting by daily discussions of topics related to the text or author, which gradually open the students' eyes to a small portion at least of Latin literature.

V. A notebook is kept as evidence of serious work.

We do not maintain that this plan is a cure-all applicable to every ill in Latin classrooms. In many secondary schools no serious problem confronts the classical departments; in others such difficulties as exist can be remedied by less radical means. There are high schools, however, in which the number of those failing in Latin each year is quite large. The majority of these students cannot be saved by "better teaching" or "frequent consultations with the teacher." They simply are unable to read the amount of Latin required in the regular Caesar, Cicero, and Vergil courses. The colleges, no doubt rightly, insist upon four books of Caesar, six orations of Cicero, and six books of Vergil. Very well. Let our good students read this much Latin.

But what, meanwhile, is to become of those who cannot keep up? Are we to drag them along with the class as best we can, or shall we deny them the privilege of studying Latin? The eminent Latin scholars to whom we naturally turn for guidance deserve our respect, but we must feel that very often they do not understand the high-school boy's limitations. We cannot afford to neglect the weaker students who do not go to college. Surely it is worth while for them to acquire accuracy of judgment thru translating and to be touched even in the smallest degree by the spirit of the classics which pervades modern literature. And will not the colleges pardon us if we break with tradition by organizing new courses, tho perhaps we seem to encroach upon their fields, while we endeavor to give these boys and girls something they will never get if not in the high school—a love for knowledge?

Even if the plan which we have outlined is adopted we shall find students occasionally who cannot pass, but if we eliminate those who are clearly unable to do anything with Latin, the number of failures will be very small indeed while the teacher can feel that those marked "passed" are taking something of real value from his classroom.

C. MODERN LANGUAGES

A. METHODS OF TEACHING GERMAN AND THE PERSONALITY OF THE TEACHER

AMALIE NIX, PRESIDENT, GERMAN PEDAGOGICAL SOCIETY OF MINNESOTA, ST. PAUL, MINN.

There still exists a vast difference of opinion among educators with regard to the methods of teaching a modern language. The first part of my subject, "Methods of Teaching the German Language," has been exhaustively and admirably treated by other language teachers. Permit me today to compare antiquated methods with those of the progressive language teacher. However, efficient instruction is not entirely based on method. The discipline of minds, the acquisition of knowledge, should go hand in hand with the spiritual uplift, with the culture of souls. It is evident that the personality of the teacher is inseparable from the forms of instruction. Pedagogical leaders like Pestalozzi, Froebel, Herbart, Ziller, and Rein emphatically declare that methods of teaching, correctly applied, psychologically and pedagogically, are of little value if the teacher is not endowed with the loftiest ideals, the noblest aims, in the development of citizenship. Ziller says: "Die Persönlichkeit des Lehrers übt die grösste Macht auf seinen Schüler aus; unbewusst nimmt dieser die Geistesrichtung des Erziehers an."

Three essential factors enter into all methods of instruction: (1) the pupil, (2) the subject-matter, and (3) the teacher. In order to succeed in the teaching profession all methods must be based on psychology—the science of the mind—and on pedagogy—the science of teaching. In the teaching of a language it is of the utmost importance that the teacher should be thoroly familiar with both of these sciences. Methods based on a psychological foundation must take into consideration the age of the pupil, conditions of home life and educational advantages, inheritance, and, in general, the reasons of retardation and acceleration.

Unlike those of Germany, there are very few school systems in our Union which have introduced German as a second language in the elementary grades. Therefore our attention is drawn mainly to the high schools, where German is generally begun in the first year. In accordance with my observations in the German departments of various high schools, I cannot ignore the fact that there still are many persistent adherents to the translation method, perhaps more than you and I suspect. These teachers hold that the achievement of linguistic efficiency is directly dependent on grammar and translation instruction.

Whenever I hear English used exclusively in German classrooms by teachers and pupils, notice that grammar is treated as all-important, I am forcibly impressed with the idea that the teacher's linguistic difficulties are embodied in the spoken language, which accounts for the lack of a German atmosphere in the German classroom. And furthermore, Goethe and Schiller could have hardly recognized some of their works in the translation offerings presented on various occasions.

The pupil should not study the literary language before the spoken, because his associations are with the latter. In an army of disconnected and grammatical rules the pupil does not learn to think in German and consequently lacks power of expression. The unfortunate victim of the translation method can rarely describe the simplest action in German after graduating from a four-year course.

In classes where advocates of a superannuated method reign supreme, a lack of interest, of inspiration, and, in general, an atmosphere of rest are perceptible.

Twice I have complied with the request of conductors of university summer schools in Germany to lecture on "The American School System." While there, trying to convey to my audiences the prominent place we occupy in the civilized world's system of elemen-

tary and secondary schools, my pride was considerably hurt when substantiated facts were revealed by scholarly professors of noted German universities, that there were ample proofs of an absence of definite knowledge in numerous graduates of universities and colleges of standing, who had gone abroad to continue their studies in Germany. Among the subjects mentioned, none were criticized more rigidly than the teaching of German; many students from our Union were said to possess not even a "smattering" of the spoken language.

Professor Hugo Münsterberg, of Harvard, has told us frankly that our students do not master anything completely, accurately, that they do not possess the habit of strict mental discipline, and that intellectual disorderliness consequently becomes a habit with them. Can we doubt the absolute correctness of his assertions? Are we not digging too deep theoretically without placing emphatic stress on the practical issues of our theories?

Still, I claim that the future must necessarily bring an all-around change, a thoro reform in modern-language methods. Let Schiller's "Glocke" and the genuine bell at Schaffhausen resound their inscription vividly and impressively into our souls for professional improvement: "Vivos voco, mortuos plango; fulgura frango."

That I am not a radical reformer, one who would strictly adhere to a certain method to the exclusion of all others, I might state right here. On the other hand, I believe that the phonetic method should be used in conjunction with the direct method, supplemented by the translation method.

It has been my good fortune to have had among an audience, while lecturing at the University of Marburg, the founder of the phonetic method, Professor Viëtor, and to have made his personal acquaintance.

That the German language is acquired as a spoken language, by following the phonetic method, is a well-established fact. Still, critics inform us that the literary language is sacrificed by teachers who adhere strictly to the phonetic method, great stress being laid on sense-perception. Besides mastering pronunciation and enunciation, the spoken language is taught by means of object-lessons. This method is certainly perfectly in harmony with our demands for efficient results in the teaching of German. But again we are told that our course should then cover at least eight years in high-school German, if we wish to familiarize the pupils with the literary language, with some of the gems of German literature. That our school curriculum does not admit of such a plan in secondary education is self-evident. As a moderate reformer, I, therefore, believe in the reform method, which we style the direct method, and by means of which we secure the speaking power in our pupils of German, and later a ready understanding of some of the works of our classics.

I maintain, further, that interpretation by means of the translation method, together with the teaching of German grammar inductively, basing the spoken language on the reading-matter, is correct, when chosen with wisdom. Translation from the German into the English, or vice versa, is to be occasionally recommended.

However, the pupil's translation should, if possible, be followed by that of an authority on translation, be it the teacher or an author; e. g., if pupils have comprehended, memorized, and recited in class, or have sung a lyrical poem, like Goethe's "Wanderer's Nachtlied," I do not hesitate to proceed to Longfellow's translation, which they enjoy almost as much as the original German:

O'er all the hill-tops
  Is quiet now,
In all the tree-tops
  Hearest thou
Hardly a breath;
The birds are asleep in the trees;
Wait, soon like these
Thou, too, shalt rest.

Among translations from the English into the German I select similarly that of "Home, Sweet Home" by Robert Nix, proceeding in the same manner as before:

Ruht auch auf Palästen und Marmor der Blick,
Das Herz sehnt sich immer zur Heimat zurück.
Der Zauber des Glückes umstrickt uns nur dort,
Die Heimat ersetzt uns kein anderer Ort.
Heimat, trautes Glück!
Das Herz sehnt sich immer zur Heimat zurück.

Aus der Heimat verbannt, lockt nicht fremdländ'sche Pracht,
Mich zieht's zu der Hütte mit Stroh überdacht;
Dort sangen die Vöglein and flogen mir zu;
Gieb diese mir wieder und Frieden und Ruh!
Heimat, trautes Glück!
Das Herz sehnt sich immer zur Heimat zurück.

Many other German and English poems and songs can be treated likewise. I am convinced that the spiritual influence, the development of *das Gemüt* are of vital importance in the teaching of German; therefore I make an ardent plea for the teaching of good poetry, and the singing of German songs.

To me it appears unwise to prescribe a beginning lesson formally in accordance with the direct method. Is it not better to have the teacher look at the pupils carefully, consider the number and their apparent degree of intelligence, and then base the subject-matter on these conditions?

Sometimes I have successfully aroused the interest of my beginners in German by teaching the first steps in courtesy, as: "Guten Tag, Fräulein"; "Guten Morgen, Herr Schmidt"; "Guten Abend, Frau Müller." "Der Vater, die Mutter, der Bruder, die Schwester, der Grossvater, die Grossmutter, der Onkel, die Tante," were taught in connection with these forms of greeting. Then followed: "Adieu," "Auf Wiedersehen!" "Danke sehr," "Bitte sehr." Carefully I explained the meaning of the articles, drilled them in phonetics, and let them apply all they had learned in the first lesson.

Before leaving the classroom I feel that a German atmosphere has been created, as the pupils delight in conversing with one another. At the close of the first week, they ask questions in German, calling on their classmates for an answer.

The process of learning a foreign language is mainly that of forming associations. In learning our own language we associate words and sentences with thoughts, ideas, actions, and events.

Easy prose writings, such as Storm's *Immensee*, von Hillern's *Höher als die Kirche*, as well as simple plays, Wilhelmi's *Einer muss heiraten*, Benedix's *Nein*, etc., can follow the first year's work. Compositions, mainly reproductions of the texts read, and letter-writing in connection with the same work, are also profitable.

The Junior and Senior years should introduce the classics to the students of German. Schiller's *Das Lied von der Glocke* and his most popular drama *Wilhelm Tell* can be studied; furthermore Lessing's *Minna von Barnhelm*, Goethe's *Hermann und Dorothea*, *Sesenheim*, and *Iphigenie auf Tauris*.

I am fully convinced that by a happy combination of the various methods of teaching German, with the direct method prominently in the foreground, our teaching of the German language can be brought to a degree of efficiency to be equaled alone by the results obtained in Germany in modern-language instruction. Furthermore, we should remember that the field of activity in the teaching of German is plowed and cultivated by the teachers of German. Our methods, our successful aims in developing *das Sprachgefühl* in our pupils, in creating a German atmosphere, will eventually lead to a proper esteem of the German language.

As a finishing touch to the little information I have given you, I shall dwell briefly on the personality of the teacher. We all know that a noble character in the teacher is essential

to success. The higher the ideals of the teacher, the more can be expected in this direction from the pupils.

The teacher who has taken up his residence in Germany will not alone be aided with the acquisition of the German language and German literature, but he will recognize that laws are not merely created, but enforced, also that the German teacher is occupying a lofty position.

In our own country our pursuits in life are more and more approaching the practical. Money-making is the chief aim toward which the youth is directed, often at the sacrifice of his soul. And how does this apply to the teaching force? Is it not a fact that there are still teachers appointed on the strength of being somebody's political friend, that no law is recognized, that no law prevents their appointment?

Is it indifference alone, or lack of courage, that we, as teachers, do not protest when we know of conditions that prevent the growth of the good and the noble in our pupils? Can a teacher be filled with pedagogical enthusiasm if he runs a real estate office in the afternoon, his office hours being from two to six? Should he not be forced to remain in this real estate office all day?

It is my own personal belief that great teachers can be trained, that will-power may help to create enthusiasm, and that enthusiasm leads to success. "Great teachers never die, their very names are an inspiration."

DISCUSSION

Eda D. Ohrenstein, Hyde Park High School, Chicago, Ill.—Whatever arguments I shall be able to present for the direct method will have to be based on commonsense and actual experience. Miss Nix has just stated that the advocates of the translation method insist that linguistic achievement depends upon translation and grammar: that the pupil must have a thoro understanding of grammar before he is ready to speak: and that he must translate or he will not be able to comprehend a foreign text or recitation conducted in the foreign tongue. Nothing in the world could be more arrant nonsense. All of us have at some time or other watched some small boy instructed in the art of whistling. He is told just what to do with his tongue, his lips, his breath, etc. However, none of us ever expects a small boy to whistle that way. Any sane person says, 'Look." The boy looks on, then tries, and presto, the little boy whistles all alone. You wouldn't teach a person swimming by taking him to the water's edge and explaining by means of elaborate charts the various motions. Of course not. No half-sensible layman would doubt the idiocy of such instruction, and yet the taxpayers the country over send their sons and daughters to our high schools and allow teachers to practice just this sort of nonsense, not only once for a joke, but often thru four consecutive years. You and I would be horrified if upon entering a mathematics class, we should be treated to a dissertation upon the origin of Arabic numerals, and yet daily and hourly, in the largest and richest cities of the world, you and I not only can hear, but have heard, modern language classes where not a single word was uttered except in the mother-tongue. How long would it take you to master mathematics after you had learned the complete history of the numerals? The adage that the only way to learn to do a thing is to do it holds as true here as it does in politics. The old fallacy that you cannot learn a foreign language this side of the Atlantic is true only if you are willing to accept the atrocious translation method as pedagogically correct. I would not condemn translation as such. Translation is an art second to none except literary creation; as such it can be practiced only after a good speaking knowledge has been acquired and the essentials of grammar fully mastered. Miss Nix has told you that translation soon turns the vivacious teacher into a lifeless one. She is needlessly alarmed. No vivacious teacher would ever continue in the translation method. She might begin so, particularly if her knowledge

of her subject were not exhaustive, but she would gradually leave the dead shell behind her. All right things grow from day to day and the fact that the teacher teaching the direct method learns with her classes is proof that her method is right; the fact that no progressive teacher ever goes back to the translation method is proof positive that the translation method is not right. Hugo Münsterberg tells us we Americans are mentally disorderly. No doubt we are. It is our national shortcoming, and it is a great misfortune, but misfortune or no, we must accept the fact. We are a business nation. We want returns for everything we do, and we want to know why we do things. In Europe the school-teacher says, "Johnny, write that sentence one hundred times," and Johnny does. Here in America if you and I should say the same thing, Johnny's first piping note would be, "What is it for?" and Johnny is right. The Johnnies all over the country are forming a monster choral society, only unfortunately what they are singing is, "We won't have any more useless foreign languages." Now if you and I love a language and its literature and believe in its utility we must give it to Johnny in the form in which he can use it, and when Johnny comes to class, we must talk German about German books, we must talk about the weather, and about our neighbors, and about anything else that happens to suggest itself. Then Johnny will like to come to class. He will feel that he is getting more than when he studies by himself. If he is to come to class and merely recite the translation he prepared at home he had better stay at home and study some more. Furthermore, if you read classics in your classes, never cease dwelling upon the vital beauties of the text, never cease impressing upon your pupils that the broad principles that were true in the days of Genesis persist today. Unless you make your text vital, your pupil will have no sympathy with your classics. His natural sympathy is with the present hour; but when he is made to feel that what was written a century or more ago is applicable to conditions today and can be used in argument in the family discussions, he will read his classic eagerly. The text is just the starting-point. Its applicability will be determined by the culture, the breadth of vision, and the personality of the teacher.

Miss Nix has, further, told us of our inferiority in command of German and of the German's superiority in English. Yearly we see thousands of Germans who studied English abroad. Do they speak English so very well after a residence of a year among us? Do those we meet in Europe understand us when we speak to them in English, and can we understand them when they speak to us? Ask any large business house about the foreign letters it receives, and you will be told that the foreigner's meaning is always clear provided you have the original text side by side with his translation. The same fact is attested to by Americans who attend English classes in foreign schools. The translation crime is our heritage from the days when Latin and Greek were supreme in the curriculum and even in Latin and Greek that method is downright wrong. If pupils heard the Latin and Greek text daily instead of just seeing it, they would master infinitely larger vocabularies and those languages would not be forgotten as soon as the study was completed.

Lastly, the personality. We have been told that the personality of the teacher should live. It does. We live in caricature, in fiction unpleasantly, and in the play of children. Watch them and you will see why in literature there is thus far not one single sympathetic portrayal. They show us our weakness. All they do when they play school is "boss." Isn't it time that we gave that up? A feeling of fellowship, of humanity, is what we need. If we have worth, our pupils will find it out on the floor level. There is no real value in trying to make a pedestal of the teacher's platform.

B. THE PLACE OF PHONETICS IN HIGH-SCHOOL GERMAN

EDUARD PROKOSCH, PROFESSOR IN THE UNIVERSITY OF WISCONSIN, MADISON, WIS.

We Americans claim to be practical people, and so we are—in some respects. But in certain matters, especially in the way in which many of us still are teaching and studying foreign languages, we display an unpractical romanticism that would put to shame any mediæval philosopher or alchemist.

There are two ways of studying languages: to study them, and to study about them. The second, the study and comparison of the structure and development of languages, if carried on along scientific lines, is one of the finest pursuits of intellectual endeavor. But to make it an important part of elementary language teaching in secondary schools, by laying emphasis on grammar and by the use of translation, is, in this "practical" twentieth century, and in this "practical" American country, either fantastical romanticism or an intellectual crime.

If we teach high-school pupils a language, we do it, or ought to do it, with the purpose that they should learn to use it—whether that use be for reading only, or for reading and speaking, has little to do with the first steps in teaching. For either purpose, the language will not be ready for use until it has become a living thing that is heard and spoken. Even for the acquisition of a mere reading knowledge the pedagogical saying that we learn to do a thing by doing it is not true. We do not learn how to read a foreign language by reading it; thousands of pages of mere reading and translating would not give us a reading knowledge if that reading were not, at least unconsciously, coupled with an acoustic reproduction, an actual or a subconscious transposition of the printed signs into living words. Even the legendary race of "visualizers" is compelled to make use of such reproduction, even tho it is claimed that printer's ink is to them a marvelous aid in this effort.

Whether the method be direct or indirect, natural or unnatural, visual or oral: to teach a foreign language without pronouncing it constantly, carefully, consciously, is a childish undertaking. Theoretically, the question of correct or incorrect pronunciation is of secondary importance; the pronunciation must, first of all, be easy, fluent, sure; of course, it goes without saying that a faultless pronunciation is preferable to a faulty one; but one may have nearly complete mastery of a foreign tongue and mispronounce it; no one, however, can acquire any command of foreign languages, for reading, speaking, or writing them, without being able to pronounce them easily and fluently.

Gifted people can attain an excellent, correct, and fluent pronunciation of a foreign language without any instruction in phonetics. No one can doubt that. But only few are gifted in that direction; every high-school teacher's experience will bear that out. With the majority, endless repetition and correction on the part of the patient teacher are necessary to make at least a decent pronunciation possible. But that very necessity of unceasing correction will for a long time be a source of uncertainty and confusion to the pupil if the teacher limits himself to correction without stating the reason. To state reasons in pronunciation, however, means to teach phonetics. Left to himself, the student would gradually acquire a fairly fluent but incorrect pronunciation; hampered by an unphonetic teacher's correction, his pronunciation becomes faltering, without, in most cases, becoming correct. In our grammar teaching we often exaggerate the desirability of stating our reasons for corrections; in matters of pronunciation, many of us are apt not to state any reasons at all.

If phonetics is to be made use of in teaching, it should be taught at the very outset—simply, but systematically and carefully. Even tho the speaker believes that in the first year of language teaching the mother-tongue should not be used in the classroom, he would except from this the first four weeks, which ought to be devoted to phonetics. In these four weeks the pupil should not be spared the difficult information that he

possesses a tongue, two lips and rows of teeth, a palate, and even two vocal chords; he should become familiar with their chief functions in speaking so that he may not "remain a stranger in the magic world that is concealed in man's oral cavity"; it is not even a grave misfortune if, perchance, he should learn about four phonetic terms: stop and spirant, voiced and voiceless. Together with systematic drill in pronunciation, this will be sufficient for the first four weeks. After that, during the whole remainder of German instruction, corrections of pronunciation need no longer be mere statements of facts, but the pupils can justly be expected to make the necessary corrections themselves. The great value of Viëtor's wall maps in this direction is too well known to need description.

In the elementary classes of the University of Wisconsin, in addition to Viëtor's charts, wall maps are in use that show in diagrams the organs of speech and the most important differences in the production of German and English speech sounds. It would be of great value if some American publisher could be induced to publish such maps for general use in high schools.

The use of Viëtor's charts necessitates, of course, that the pupils be acquainted with phonetic writing, and as only three or four new characters are needed for that purpose, this is hardly asking too much as long as only a passive knowledge, an ability to recognize phonetic signs, is expected. It is a valuable aid to quick and effective teaching if the pupil who mispronounced English *w* for the German letter *w* can silently and impressively be referred to the phonetic sign *v* on the chart or the blackboard. Rare, occasional use of active phonetic writing might be at least permissible, but general conditions in most of our secondary schools (lack of time not being the least consideration, and lack of accuracy one of the foremost) do not let it seem advisable to make such wide use of it as is successfully done in European schools.

DISCUSSION

Leonard Bloomfield, University of Illinois, Urbana, Ill.—Professor Prokosch has shown us one regard in which school foreign-language work may profit from scientific linguistics. There can be no doubt that the poor results of modern-language teaching in America are primarily due to our neglect of the facts and principles ascertained by the scientific theoretical study of language. I shall mention two other directions in which our school language work usually fails by ignoring certain fundamental characteristics of speech.

Just as the sounds of French or German cannot be taught in terms of English sounds, but are in each case incommensurably different, so the value of a foreign word cannot be stated in English words. Even such concrete names as German *Tisch* and English *table* do not match; in this case, for instance, the German word cannot, like the English, be used of a diagram of figures. Similarly German *reiten* is used only, German *fahren* never, of *riding* on the back of an animal, French has no verbs corresponding to our *sit* and *stand*, and so on thru every word in these languages.

Even if it were pedagogically possible to present, with a little explanatory comment, such equations as German *reiten* : English *ride*, they would still be grammatically untrue, for the English word is used also in the imperative and in the first person, *I ride*—the German form *reiten* in the imperative only with a following *Sie*, in the first person never. Teachers who have dealt with pupils taught by the translation method will here recognize the source of two of the commonest mistakes.

In short, the attempt to teach foreign sounds, words, and constructions in terms of English is shown by linguistic science to be hopeless, and it is unnecessary for each teacher to make the attempt all over again for himself. Methods based on translation or otherwise depending on the pupil's native language, in our case English, as a classroom instru-

ment, are even in the hands of the best teacher foredoomed to poor results. Those who care to follow up these remarks, for instance by reading such books as Jespersen's *How to Teach a Foreign Language* or Bahlsen's *The Teaching of Modern Languages,* will find that the only form of teaching in accord with the scientifically ascertained facts about language is some form of the method known as direct.

J. N. Lenker, of Minneapolis, Minn.—I read with interest everything written on the teaching of modern languages according to the new, modern, direct, natural method which has worked a change in European countries and is fast being introduced into America. I am a Pennsylvania German. When my father was of age he spoke only German, and when I was of age I spoke only English. I went to Germany to learn German and learned it. Then I traveled thru Denmark, Norway, and Sweden and learned Scandinavian. I can assure you that anyone who has learned to speak a second modern language will soon acquire a third. In fact the study of a third and a fourth language will be a pleasure. Did you ever think that about one-half of all our study is devoted to language, the science of human speech, our native tongue, ancient and modern languages? It is English, English, and English; Latin, Latin, and Latin; German, German, and German; Swedish, Danish, and Norwegian. Why do we not have the satisfactory results, as in Europe? Is it not because of our round-about, unnatural methods? Can we not get down to simple, fundamental, natural principles? Is it not a fact that every child has been six years to school before entering the public school where nature provided the parent as teacher, the kindergarten of the home which is the foundation of the kindergarten of the school? Now what does the child study in those six formative and most important years for discipline? It studies no mathematics, no science, no history, the only one subject taught and learned in those six years is language —not an ancient but a modern language. And as to the method, no textbook is used, no ink and paper to appeal to the eye. It is the modern, natural, direct method of an appeal to only the ear and the tongue. I believe in building the education of the child in school on that of the home, bringing the school and home, teacher and parent nearer together.

The Americans are the best linguists in the world. Coming here with the dialects of all countries, twenty of the twenty-nine million immigrants to our shores learned English after their arrival. Their children would be as good linguists if taught by the use of the direct, natural method. We should raise our standard to a three-language education: first, English, the language of the nation; second, the language of the home or immigrant settlement, regardless of what that may be; and third, the language of the most profit to the cultural and business interests of the child in later life.

D. MATHEMATICS

THE RELATION OF THE SUGGESTED GEOMETRY COURSE TO THE MANUAL-TRAINING COURSE IN HIGH SCHOOL

R. H. JORDAN, MINNEAPOLIS, MINN.

The Final Report of the Committee of Fifteen on the Geometry Syllabus is so admirably done, and is so evidently framed with the idea of providing a common ground on which all secondary teachers may unite, that it would be presumptuous to pick out any single phase of the report for criticism, in view of the broad general issues involved. And so this paper is not presented in a spirit of criticism but rather in the hope that the work in geometry may be made more attractive to a certain large class of our students, with corresponding gain in prevention of failure and in better equipment of the student.

Accordingly, your attention is called to that portion of the report headed Section C, Special Courses. Paragraph (*a*) recommends that there be no attempt to outline differ-

ent courses for various classes of students in the high schools, but that in special cases omissions and increased emphasis upon theorems retained may be advisable. In view of the great number of courses now offered, it is very clear that this recommendation is the only practical solution of what otherwise would be an interminable task, if carried to its logical conclusion. However, the needs of that large and constantly increasing body of students carrying manual and industrial subjects are so manifestly different from those of any other groups, that it may not be amiss to consider them for a few minutes and attempt to reach some conclusion as to whether they may not be deserving of some distinct mention or recommendation.

Before proceeding, the speaker wishes it definitely understood that he is in complete accord with the statement given in the report, regarding the purpose of the study of geometry. And also, in general, he is in agreement with the syllabus recommended in Section E; so that it will not be necessary to enter upon the phases of the subject which would touch these portions of the report.

But it is the feeling of many teachers, both of geometry and of manual branches and drawing, that the manual student should be differentiated from the other classes of pupils. Some of the reasons leading to this conclusion are:

a) Whatever may be the purpose in placing manual and industrial branches in the curriculum, from the point of view of the educator, it is very evident that 99 per cent of the boys who elect these subjects make the choice on the basis of future career, and are definitely directing their aim toward mechanical and technical life-work, as distinguished from their brothers who are working, with greater or less definite purpose, toward commercial and professional careers. They and their parents estimate their course directly from its bread-winning value and will inevitably put more and more stress upon this phase, as they are recruited in increasing numbers from the classes not now patrons of the high school. And to increase these recruits, we must make our appeal to them along the practical content of our courses.

b) Accordingly, the lad's mental trend is toward the immediately practical, and he is naturally impatient of those subjects whose treatment does not demonstrate such practical value. Now, of course, we are not justified in pandering to his whims to the extent of eliminating from his course all subjects which, in his phraseology, "don't do me no good." But if we are to hold him, and bring more of his type into our sphere of influence, we must endeavor to shape the work which we do compel him to take so that it may meet his objection, and bring him to see the practical good in things which he now passes over as trivial and without caring whether he succeeds or fails, a state of mind which almost inevitably induces dismal failure. It is safe to say that 50 per cent of our present failures could be avoided if we could bring our students to feel that the work contained a direct means for increasing money-earning power.

c) The nature of his industrial courses demands that allied branches giving him more power in his practical aims be introduced as early in his course as is consistent with his mental development. Mathematics and physics, especially, should be made working factors toward this end and should be placed within his grasp in a practical form as early as is possible.

d) The time element is an appreciable factor. Both for the lad who is anxious to get into his life-work as soon as possible and for the boy who hopes to go into higher fields of technical training, it is important that nonessentials be eliminated to as great an extent as possible: for the first, that he may be enabled to get returns for his effort in a financial way as soon as he finds himself really prepared, and for the second, that he may broaden his preparation by the addition of more culture subjects than are usually permissible as the manual side of the work more and more encroaches upon the time set aside for such branches. It is very clear, then, that if any of the allied work can be condensed or abbreviated as the report suggests may be done, it will result in decided advantage.

e) There is a lack of sympathy with the present course on the part of the manual teachers themselves. Most manual teachers feel that the course taught with the general purposes outlined in the syllabus does not assist in any material way the effectiveness of their students, and, worse than that, if there is to be any real correlation, in many cases the manual teacher must adjust his course to present the necessary work, rather than the reverse, which is certainly the natural order. It is certainly an anomaly for the drawing teacher to be required to recast the logical order of his outlines in an effort to work out some illustrative problems for his students who are also in geometry. And yet there are schools in which this very thing is being done. The general objections raised by the manual teachers, however, are that the subject is usually placed too late in the course to help materially, and that the presentation ordinarily followed does not bring before the boy the facts necessary for ready application to manual work.

f) This lack of sympathy on the part of the manual teacher is naturally reflected in the attitude of his students toward the geometry class. It is almost sure to belittle in the mind of the student the importance of vigorous attempt to conquer the difficulties, and so we have another cause for lax attention, slack preparation, and resulting failure.

Now, to meet these difficulties, we must either arrange our entire course with reference to the manual work, a thing which is not desirable in the ordinary combination school, or we must group our manual students apart mathematically. The latter, of course, can be done only in schools whose enrollment permits. In the smaller schools the only remedy is to recast the entire treatment of the subject, so that some middle ground may be held. But in the schools large enough to support two beginning classes in geometry, one of these should be confined to students in the manual subjects, and a special course worked out. This course should be made up for the first year of combination work in arithmetic, algebra, and geometry, reviewing the common arithmetical computations, with definite drill in decimals, and giving an introduction to algebra, at least thru factoring. The general facts of geometry would be taken up, special stress being placed upon the theorems which would be of immediate advantage in the drawing, cabinet, and metal work, with much construction practice, covering as much of the ground outlined in the syllabus as would be possible in the time allotted. This would result, as indicated in the report, "in reducing the course to about one-half the traditional length." It would be likely that it would be found desirable to take up the work in geometry simultaneously with that in the algebra, dividing the time equally between the two subjects. But where this would be thought confusing to the pupil, the geometry might be left to the second semester of the year.

The second year would be given to the completion of the essential algebra, and to developing the remaining geometry work for the benefit of those students who might plan higher technical careers. In any case, not more than two and one-half years would be required to bring the student up to the highest point of efficiency to attack the higher mathematical branches, and it is certain that in two years all that the average student would need could be developed; the continuation of the work in geometry for these students, it seems hardly necessary to say, would be dependent on the further needs of the course, special reference being made to architecture and industrial design in most cases, altho the development would of necessity vary with the particular direction given to the manual work in each individual school.

To sum up the advantages of this proposed segregation, it may be said, first, that the mathematics would be of direct advantage to the mastery of the manual work, which is not now the case; second, the continual application of the geometrical principles would bring the practical value of the subject so clearly before the student that it would stimulate him to closer application, and would reduce the chances of failure to a minimum (if there were no other reason for the change, this is certainly sufficient); third, it would be a stimulus to advanced mathematical study and investigation, for from the very beginning it would impress the pupil with the close relation of mathematics to industry and science, a relation-

ship which he is now required to accept on faith, with the calm assurance that "some day" he will see where the algebra and geometry are really practical—a day which does not arrive usually until he gets into trigonometry or possibly physics; fourth, as a specialized course, it would enable the instructor to put a premium upon accuracy, and to stress "100 per cent efficiency," in addition to creating a spirit among the pupils which would bring better application from the pride in a course which is actually getting practical results; and fifth, it would make absolutely necessary close correlation of the right sort between the two departments, instead of the aimless and desultory co-operation now existing in many, if not most schools.

It may be thought that much of this advantage would result if the committee's recommendation with regard to preliminary courses in graded schools be followed, and this is true, to a certain extent. But we all know that, no matter how well the graded work is done, we need more or less review when the pupil comes to high school; and just as when he has already had manual work in the grades, we find that a certain amount of this work must be repeated more intensively in high school, so by this very fact, a more intensive treatment is also necessary for the accompanying geometrical work.

Therefore, it has seemed worth while to make this plea for the manual-training students, and if there be any general agreement with the proposition that their needs are of sufficient importance, may we not ask that the committee make some exception in their behalf? If it is not desirable to do this by amending the report, a thing which is not particularly essential, may we not go on record by resolution as favoring such segregation as has been indicated?

E. SCIENCE

A. THE HIGH-SCHOOL COURSE IN GENERAL SCIENCE

V. G. BARNES, HIGH SCHOOL, MADISON, WIS.

In this paper on general science, I have two objects in mind: first, to show the faultiness of our present science course; and second, to show how these faults may be remedied. Science teachers have realized that something is wrong, and have been working for the last few years to find the cause.

In my study of conditions I find at least two elements that tend to make the teaching of science in the secondary schools inefficient, for if our students fail to grasp the great underlying principles of the laws of nature that control our existence, then our teaching has not been all that it should be. If they fail to realize that all life is but a struggle between the upbuilding and disintegrating forces of nature, and that our very existence and present mode of life is but the result of man's efforts to harness and control the natural forces that surround him, then we have not reached the highest goal possible in our work.

The first of these elements that lead to poor results in science teaching is the teacher. We come to the secondary school fresh from college and university, where we have had to deal with the students of mature minds, and with a more or less complete fund of personal experience. We are apt to carry our impressions of the higher school into the high-school classroom, and expect our pupils to master complicated statements of laws and formulae as readily as we ourselves could do. We expect them to see back of the mere law all its many applications. We forget that the formula which to us is a simple statement of existing conditions, may be to them a mere algebraic equation with no meaning whatever. The teacher of physics or chemistry or any science who tries to get out of a subject any more than the fundamental principles is making a big mistake. The average high-school pupil has no organized fund of personal experience to fall back on. From the day when he was a little "tad," to the present time, he has met with things that have puzzled him. He has

rather a large assortment of observations, but he doesn't know it. He hasn't his experience labeled and ready to hand out the moment he meets the law governing the phenomenon. He needs to be questioned and worked with before he can see the connection between his observations, and the law under discussion. Yet we, as science teachers, go blindly ahead, calmly shooting over the heads of our classes, ignoring the simple, fundamental principles of our subject, and teaching, or attempting to teach, a vast number of complicated unessentials.

We teach that kinetic energy is equal to $\frac{1}{2}mv^2$; or that the period of a pendulum is equal to $\pi\sqrt{\frac{1}{g}}$, unconscious of the fact that the average boy has no conception of mass, or the meaning of g.

We, as teachers of science, are beginning to see our mistakes in this line, and are revising our methods of teaching accordingly. This is true especially with teachers of physics and chemistry. In the last few years great changes have taken place in the content of the subject-matter taught in these two subjects. Subjects and laws once thought indispensable are now thrown out bodily.

In a physics text just published, nearly the whole subject of static electricity is omitted, and other equally startling changes have been made. The whole tone of the book shows that the author has been striving for simplicity. Perhaps succeeding years will see some of this cast-off material being brought back into use. But we may be sure of this: it will be taught in a way that will attract rather than repel the pupil. While these changes are taking place in physics and chemistry, the other sciences in the high school are practically at a standstill. Take physical geography, for instance. It is still being taught in the old slipshod way in most schools. It is taught by teachers with no special training for the work, who are consequently the slaves of their textbook. It is taught by teachers who dislike it, but who are forced to teach it by short-sighted principals and superintendents. It has been slighted and neglected for so many years, and considered a bore both by teachers and pupils for so long, that it is a wonder that it exists at all.

The department is usually poorly equipped. There is a sad lack of maps, pictures, rock specimens, apparatus, etc., all of which are necessary to make the subject real. Is it any wonder that physical geography fails to accomplish its end? Is it surprising that pupils get very little that stays by them, or that is of lasting value from its study?

In a great many schools it is required of all Freshmen. In these schools classes are bound to be filled. But in most schools where physical geography is offered as an elective study, it goes begging. In Madison, before physical geography was taken out of the first year, it was an elective, and out of a class of 290 Freshmen, only 40 elected physical geography. Other schools report the same state of affairs. Physical geography, as it is being taught, is dead. It is as lifeless and cold as the rocks with which it deals.

The second element that leads to inefficiency in our science work is the course itself, for I wonder sometimes if physical geography can ever be made to live even with the best of teachers and the most complete equipment if it is to be continued as a first-year subject.

Physical geography is not a basic science. It does not deal with the fundamental laws of nature, but with their applications. Take, for instance, such topics as winds, ocean currents, mountain formation, volcanoes, glaciers, etc. Every one of these depends upon some law of physics or chemistry for its explanation, and that law must be understood before any one of the above topics can be satisfactorily discussed.

How can we ever expect first-year pupils to understand rock disintegration, or the action of ground-water, without first understanding something of expansion and contraction, chemical action, solution, and capillary action? How many pupils know of what they are talking when they say that air is composed mainly of oxygen and nitrogen? Do they know anything of gases, or the properties of gases? Do they know anything of oxygen, and its action on various substances? Can they understand how an insoluble substance

may become soluble? Do they really know that a heated substance expands, and that when it cools, it contracts? Do they see any reason for an underground water, other than that it is water that soaked into the ground after a rain? We take it for granted that they do know most of these things. Consequently, the pupil is handicapped by lack of sufficient basic knowledge on which to build the facts of physical geography.

If we are to keep this subject in the first year, we must first give the student a brief insight into the chemical and physical laws which underlie it.

Let me quote a passage taken from one of the best physical geography texts—remember the pupil is a Freshman, just out of the eighth grade: "Underground water finds many mineral substances which it is able to take away in solution. Its power of solution is greatly increased by oxygen and carbon dioxide, and other substances which it obtains from the air and from decaying vegetation." This is perhaps enough to show what I am trying to get at. What does the above statement mean to the pupil? How does he know that air contains oxygen and carbon dioxide? Or, if he does know this, does he know anything of their chemical or physical properties?

The pupil ought to have the two gases before him. He ought to be allowed to see oxidation taking place. He ought to witness the effect of carbon dioxide on lime water. In other words, the teacher should take time from the study of physical geography proper, to develop the ideas necessary for the pupil to have, to enable him clearly to understand the subject-matter of physical geography.

Field trips, lantern slides, maps, etc., all help to make the work more interesting. But in addition to these there should be the foundation work.

Now see where this leads us. We teach a little physics and chemistry to clear up physical geography. Then when we teach physiology, a little chemistry and physics is necessary for the proper understanding of that subject. Then after we are thru with all these applied sciences, we teach the basic science in the third year. What a wonderful example of what not to do this is!

School men are beginning to realize that something is wrong with the way sciences are being presented. Hence the new demand for an elementary general science in the first year. To my mind an elementary course in physics and chemistry should be offered. Isn't it true that the subject-matter dealt with in these two subjects is at the base of all our other sciences? Then why should we teach physical geography, botany, and physiology, which have their foundation in physics and chemistry, before we teach the fundamentals in these two? Think how much more simple the teaching of any one of the above-mentioned sciences would be if the pupil had even the slightest knowledge of physics and chemistry.

With all our science leading back to physics and chemistry, and with physics and chemistry coming last in the school course, where could we arrive but in confusion?

Suppose we make the plunge, and depart radically from our present system! The question of "What to teach?" arises immediately. In physics the subjects of gravity, pressure in fluids, water-power, heat, optics, and radiation could all be treated in an elementary way in the first half of the Freshman course.

In chemistry a study of the gases such as oxygen, nitrogen, hydrogen, chlorine, their preparation and properties; a study of a few important elements such as carbon, sulphur, phosphorus; and the common metals, such as zinc, iron, lead, aluminum, copper, etc., could be made in the second half of the first year.

The nature of such a course should be such that the main laws underlying these subjects would be taught. In many schools where a course in so-called elementary science exists the principles and laws are lost sight of because the writer of the text and the teacher seem to feel that the course should be intensely practical. It is true that enough work in applied physics and chemistry should be given to keep up the interest of the student and to clinch the principles. But it seems to me that the underlying principle is the thing to be emphasized, and not the application.

The first work in any science should be the teaching of the pure science. Think of the age of the student: his mind is not mature—he cannot take the general law and make specific applications of that general law to concrete conditions. His mind works the other way. When I advocate the teaching of physics and chemistry to first-year people, I do not advocate teaching the physics and chemistry of the third and fourth years. What we want to do is to lay a foundation in science upon which the teachers of geography, biology, and applied physics and chemistry may build.

No other branch of science can be taught so easily to Freshmen as these two, for the method of teaching them is purely inductive. The student is led easily from the observed phenomenon to the underlying principle. The only time the student loses interest in the subject is when the teacher gets into the deep waters of theoretical discussion. This very ease with which the student accepts the principle leads the teacher astray into a labyrinth of practical applications and theory which so confuses the student that the principle is lost from sight and mind, that he is left with nothing definite to which his mind may cling.

Do not misunderstand me in this, and think that I am advocating the doing-away with practical physics and chemistry, for I am not. These have their place in high-school work. I would make the present courses offered by most schools even more practical than they are now. They should be courses in applied physics and chemistry. I am talking of a first-year science course, and I will say again that such a course must be elementary. It must deal with the first principles, it must be pure science.

One great difficulty that stands in the way of teaching such a course is the lack of teachers who are capable of so modifying their ideas as to be able to present the work in simple enough form. In our own school we realized the need of a basic science on which to build the work of the succeeding years, but when we came to the point where a definite step in that direction was necessary, the lack of teachers capable of presenting such a course as we wanted stood in our way. We found that the average college graduate is not fitted for this kind of work. Our observation of the work in other schools where a first-year science was attempted proved to us that the time has not yet come when we could safely take so decisive a step. In our case a compromise course was taken. Physical geography was taken out of the first year and in its stead we offer next year as a second-year study a course in what we call geography. In this course we plan to give only enough of the physical side of geography to help the student to understand the economic and social side of the subject. In other words, we are to give a course in physical, economic, and political geography. In the first year we offer a course of elementary biology and civic hygiene. This may seem at first thought a step away from our ideal. Perhaps it is—but we surround this first-year study with such a chemical and physical atmosphere that the student comes out of the course with a fair knowledge of the first principles of chemical action and a lack of fear of scientific terms that will at least be an aid to him in his future studies. Further than this, he has a well-laid foundation for the study of botany, zoölogy, and physiology.

In presenting this course we found that it was too long, and that if we continued it as given, there was great danger of taking the zest and life out of our courses in botany and physiology. To prevent this we are going to shorten the course to one semester and offer a semester of civics for the remainder of the year. So our course in general science next year will be a half-year study of biology and civic hygiene with only enough biology to make the problems of civic hygiene real.

This is at least a step in the right direction for we have taught all the physics and chemistry necessary for the study of botany and agricultural botany, zoölogy, and physiology. In these subjects the teacher is now free to present his own work without the necessary waste of time in securing the proper background. With physical geography robbed of its present terrors to the student, and with botany and agricultural botany, zoölogy, and physiology, physics, and chemistry placed as electives in the third and fourth years, we feel that our science course is in such shape that we can afford to wait until we feel safe in taking the full steps outlined above.

DISCUSSION

Ada L. Weckel, Oak Park and River Forest Township High School, Oak Park, Ill.—The excellent paper which Mr. Barnes has just given us opens for discussion the whole question of science in the high school. Certainly the present period of great unrest among many of our best science teachers indicates that we are not satisfied with science as it is now taught.

Mr. Barnes has given us three reasons for inefficient and poor results in our first-year science teaching: first, the teacher; second, the equipment; and, third, the course itself. At this time, let us confine ourselves to a discussion of the third of these reasons, namely, the course itself.

It is certain that there is great dissatisfaction with our present first-year science course. We are coming to be pretty well agreed that there should be an elementary course in general science given in the first year. The content of such an elementary course is, however, the principal problem now before us. The only solution for this problem is by experiment. In Mr. Barnes' experiments thus far, I judge that he would make this general course largely, if not entirely, physics and chemistry.

My own ideas as to the content of a first general course are best expressed in the course which is being given at the Oak Park High School. This course is the outcome of twelve years of experimenting. During this time it has undergone many changes. The materials for the course are drawn from physics, chemistry, physiology, and botany. Physiology is used as the fundamental and unifying science.

This course is required of all first-year pupils. It runs thruout the year, occupying two double periods per week. It is entirely a laboratory course. With few exceptions the experiments are performed by the pupils.[1]

The criticism of the course, which, no doubt, first enters the mind of many of you is this: the experiments are isolated, not unified; and must leave the child with a smattering of physics, chemistry, physiology, and botany.

I am sure you would not be left with that opinion if you should follow the entire course in the classroom. It would then be apparent that the entire course, altho developing principles and presenting facts of several of the sciences, shows clearly the correlation and interrelation of all the sciences.

A course in general science for the first year is, I think, here to stay. The content of such a course will, no doubt, always vary considerably with the teacher and the kind of community.

B. METHOD IN THE GENERAL SCIENCE COURSE

John G. Coulter, Bloomington, Ill.

[*Abstract*]

There is an ideal of science in education which was established long ago. More than forty years have passed since Huxley and Spencer wrote of that ideal and more than twenty years have passed since American high schools began the pursuit of it. In the name of that ideal many courses have been established, have been altered, and have passed into history. But even those which have survived appear to have shortcomings. For one thing it appears to be the ideas of science they have taught rather than those ideals in whose name they were created.

Today we are considering the latest comer into this company of courses, and we are hoping great things for it. It is the newest as well as perhaps the oldest device for disseminating in society the benefits of science—this course in general science. Will it fare better than its predecessors? Will it bring us nearer to that ideal of which they have

[1] An outline of this course can be obtained on application to Miss Weckel.—Editor.

come short? If it does, that will depend more, we may rest assured, upon its method than upon its content, and so my subject impresses me as important; important enough even to excuse the use of a few minutes for the consideration merely of this importance.

Any method which applies to the general science course appears to apply also to any first-year science course. So in my title substitute for the moment for the word "general" the word "required." At once the importance of the subject is multiplied. And why not make this substitution? Is not the first year of required science generally "general"? Is not physiography, for example, often a science of the first year required of all? And is it not such chiefly because it is regarded a general sort of science—a good introduction to more special sciences? . . . .

The method of the course depends upon the aims of the course. Recently I have interviewed a score or more of teachers of this course both as to its aims and as to its content, and I am not sure whether it is the content or whether it is the aims whose variety is more striking. Certainly variety is an impressive feature of both. As to content, we may expect this variety to persist, but as to aims and as to methods designed to fulfill these aims, we may expect variety to diminish and similarity to increase. This assumption rests upon the larger assumption that there is to be a science of education—at least a science of science education. Of best subjects to be taught there may be many, far more than any one course can include, but of best methods there appear to be but few. These we shall find. We shall establish their validity, and they will become common to the introductory course whatever its content may be.

Four principal aims of the course have impressed others besides myself as especially useful in organizing a plan for method. Under this plan the lessons which comprise the course fall into four categories, the category into which any particular lesson or exercise falls depending upon what aim is uppermost in that lesson or exercise. This means of course that lessons are to be planned for a particular aim rather than for four or more aims at once; tho more than one end may be served by a certain lesson, one end, not several, is to dominate the plan.

The classification of the course upon this basis is as follows:

1. Lessons whose aim is appreciation of science.
2. Lessons whose aim is information.
3. Lessons whose aim is training; science-experience.
4. Lessons whose aim is the application of science-method to non-science problems.

As to the relative amounts of time to be given to these four types of lessons or exercises, the following is submitted: To lessons for appreciation 10 per cent, to lessons for information 60, to lessons for science-experience 20, and to lessons for application to non-science problems the remaining 10. It is also submitted that no one of these kinds of lessons should be completed before the next kind is taken up; better results will come, it is believed, from their interspersal, the nature of such interspersal being properly determined by what is most convenient on account of the content.

Another and a most important qualification needs to be made, namely, that this is a plan only for classes numbering twenty-four or less. For classes larger than twenty-four the plan would need alteration. But it is believed that there should be no laboratory classes larger than twenty-four. If the elementary science divisions which now run from thirty to forty in large high schools could be reduced to twenty-four as a maximum, it is believed that the good of the work might be doubled. Also it is believed that no point is in more need of united insistence on the part of science teachers than the point that it is not fair to judge of the value of our work when laboratory divisions exceed a certain number. Only with twenty-four or fewer can the best outcomes of our work be reasonably expected. Only with that number or fewer can a teacher be reasonably expected to give that attention to individuals which is peculiarly requisite in the science studies. Large numbers call for machine methods, and a machine-made science course can never be what a science course ought to be. . . . .

Application.—Finally we come to that 10 per cent of lessons to be devoted to the application of science-method to non-science problems. To the writer, this seems the most important part of the paper. The ground we have been traversing has been traversed before, but now we are getting onto rather new ground. It is surprising that this ground is new. With all that has been claimed as to the value of science in developing the scientific habit of thought, is it not surprising that there have been no lessons applying this habit of thought to other things than laboratory experiments? Surely our pedagogy indicates that we can hardly expect young people to use science-method in settling everyday questions until we give them some practice in using it. There is need for teaching it in connection with conduct as well as in connection with physics, chemistry, or biology. Some of our exercises might well be exercises in the application of the method of science to matters which are commonly not considered science at all.

The first year of the high school is not too soon for the effort to rationalize conduct. The life of our young people is then filled with questions of behavior toward which it would be far better for them to have the science attitude than to have the merely acquiescent attitude which usually obtains. They are observing, and drawing conclusions, and acting thereon in matters which determine the whole character of their lives, and that factor which is influencing them most is not authority, it is not good advice, it is not knowledge of consequences, and it is not sound reasoning on their own part. It is, of course, the example of their fellows, the example of unreasoning young creatures like themselves. They are investigating life and making now in the plastic years adjustments which will quickly become permanent. Are we doing what we might to equip them with that mental method which seems the best-known insurance of rational conclusions and rational behavior? We teach them how to judge in the laboratory and we should teach them how to judge outside of it. They should find by specific experience how valuable the method of the laboratory is as a method in life. There is in science that which, it is claimed, may be as important in the navigation of life as compass and sextant are important in the navigation of the ocean. On account of this claim science came into the schools and science teachers came into existence. Both have served good ends, but not yet, we think, has their greatest function been fulfilled—that function whose possibility brought them into being. It will be fulfilled only when the means are found and the opportunity allowed for them to teach science as a general method of mental operation. It will be fulfilled only when this method, working in the light of those other necessary endowments which other courses give, shall come to have large place in youth's interpretation of life and in man's behavior.

We need to make the scientific habit of thought a generalized habit of thought, we need to show the advantages which this habit of thought possesses, we need to arouse interest in the method as an ideal. I do not mean that this ideal should govern all conduct, I do not mean that spontaneity should be deprecated, I mean only that if we can provide our pupils with this method as a tool ready to hand when needed we shall be doing a great thing.

A class of teachers bought at a university bookstore some books which by mistake had been marked forty cents instead of a dollar. The attention of the class was called to the error. Only one out of fifteen made good the loss, and these were teachers! Could the scientific attitude permit such a confusion of values as must be involved in sacrificing self-respect so cheaply! The decision of the majority was surely determined by the thought of personal advantage; truth would have compelled a different course.

How many boys will not take advantage of a street-car conductor's oversight in collecting fares? You think I am getting away from my subject? But I say that what science may point out as the truth in such a matter may be more potent than any of the dictates of authority. We show how to use the science-method in deciding whether air occupies space or not. I see no impropriety in showing how to use it in

deciding whether to pay carfare or not, and it seems to me possible to discern even greater usefulness in the latter type of demonstration.

It may seem that the thing proposed to be taught is too abstract and complex for youth of this age. I have been surprised to find evidence to the contrary. The thing proposed to be taught is self-detachment from problems of conduct and attitude whose true answer is not obvious; it is the art to judge without the bias of immediate self-interest. The point that we serve self best by leaving self out of such matters is a point desirable to make clear, and the fact that strong feeling fogs the truth is a fact to be driven home. The skill which we wish to develop is skill in sizing up a situation, skill in recognizing values; the ideal which we wish to implant is an ideal of the truth as the thing best worth striving for in any situation.

Now if a thing is impracticable in education because it has not been seriously tried, then this specific proposal as to lessons for application may be impracticable, but as yet I have found no better reason than the one just stated for so regarding them. More than forty teachers, experienced in first-year modern science, have expressed confidence in the capacity of their pupils for this work. As to the capacity of the teacher—I leave that to you.

A science class of boys was engaged in exercises of the kind we are discussing. The subject-matter was chosen from suggestions made by the class. Preference was given to matters concerning which strong opinions were already held. Local matters, especially certain rather unpopular school regulations, were considered. The question was formulated and then all pertinent facts, pro and con, were set down as elicited. Each student prepared a paper setting forth his conclusions. To the teacher's surprise the class seemed to develop a positive pleasure in "showing up" the falsity of their own previous views. The boys appeared to compete with each other in demonstrating the absurdity of views previously accepted without question, and the invalidity of behavior having all the approval that fashion can give. Questions of food and clothing, of manners and friendship, of work and play, of honesty and deceit, of the spending of money and the spending of time—these were some of the questions considered. One morning the head of the school announced the abolition of football for the season. At once the school was in an uproar. The science class began as an indignation meeting. The opportunity was obvious. Football abolition was made the subject of that morning's paper. Members of the team and their supporters explained the idiocy of the faculty. The local and general facts upon which the idiotic faculty had acted were also set forth. Unsigned papers were prepared. The fact that eighteen out of twenty-four approved the act of the faculty—at least by their laboratory decision—was interesting, but the fact that the papers showed the suppression of strong personal desires and independence of judgment was even more interesting. The game was to get at the truth whatever your feelings might be, and the boys played it.

It is a method of getting at the truth, whatever the field may be, which concerns us as a national need. What profits the will to abide by truth if we cannot perceive the truth? The ethics of our politics and of our business—of our whole national life—will never be better, that is to say truer, than the ethics of the average citizen in his everyday affairs. For all our schools seem now to do, new generations will succeed into the insincerities and accommodations of this one. But the influence of science in this day may be more potent than any other influence to make widespread an ideal of truth and a scorn of untruth, and if science teaching is a means to that end we have therein more than its best defense; we have therein imperative demand that it shall not be neglected. Yet an ideal of truth serves but feebly when means to judge clearly what truth is, is lacking. We as teachers of science are more advantageously situated than our fellow-teachers of other subjects for teaching a method of getting at the truth, and if we can teach this in a way to make it effective it is the most important single thing we can do.

Science as achievement is the marvel of today; as achievement it has spread over the world, and as such we have largely taught it. But science as a way of solving problems remains a thing secluded.

In the fulfillment of their minds men are the masters of all time and wisdom, but in making up their minds they remain as children. They are filled with science in their doing, but wonderfully empty of it in their thinking.

Science as a method of thought remains as yet a thing of the laboratory, a thing almost wholly apart from humanity in the aggregate which it might so tremendously serve. This is no exaggeration—this suggestion that its contribution to human progress might be tremendous. Our science research goes forward by leaps and bounds, for all that is not founded on established fact is eliminated from it. But in the great human affairs of government and education and of social relations and of the everyday conduct of the average individual—in these there is no going forward by leaps and bounds. Sometimes we doubt whether there is any going forward at all. For in these affairs authority and prejudice, ignorance and greed, sentiment and passion are the rulers. We as science teachers are concerned with a rebellion against these rulers. They stir up in untrained minds that which parades as truth and determines what happens. Our hope is to provide society each year with thousands of young minds that it will be hard so to hoodwink.

Recently I have visited nearly a score of large cities to investigate the teaching of science in the high schools. A particular interest lay in discovering how the courses are devised to serve in this spreading-out of science as method into other human affairs. As a result of the inquiry I say that science courses quite generally do not serve this end at all. Yet on my journey I interviewed as to the importance of this matter many school superintendents and for good measure a few editors and preachers, and not one of them hesitated to concur with certain propositions which indicate the fundamental importance of this neglected matter.

These propositions are:

1. That permanent social reforms can be accomplished only by a certain sort of general education.
2. That this certain sort is an education which will lead to discernment between truth and error, clear thinking, and rational conclusions and behavior.
3. That our present system of public education, being almost exclusively devoted to the acquirement of information and skill, is almost wholly not this sort of education.
4. That of all the subjects entering into our present system of education, the science subjects are best qualified to provide this sort of education, and that in the science courses definite effort should be made to teach science as a method of universal application.

Surely it is significant that we find in our course no specific provisions at all for that very feature of science which impresses the general student of education as its most valuable feature. Thus Dewey wrote in his famous address on "Science as Subject-Matter and as Method":

I do not mean that our schools should be expected to send forth their students equipped as judges of truth and falsity in specialized scientific matters. But that the great majority of those who leave school should have some idea of the kind of evidence required to substantiate given types of belief does not seem unreasonable. Nor is it absurd to expect that they should go forth with a lively interest in the ways in which knowledge is improved, and a marked distaste for all conclusions reached in disharmony with the methods of scientific inquiry.

Elsewhere he writes:

The formation of scientific habits of mind should be the primary aim of the science teacher in the high schools. The methods which give intellectual integrity, sincerity, and power in all fields, rather than those which are peculiar to his specialty, are what he should bear in mind.

I paraphrase part of a recent letter from Professor Galloway as follows:

The psychologists have punctured the complacent doctrine that we can train in the scientific spirit in the artificial realm of the laboratory and then expect this training to be carried over into the practical relations of successful living.

It is specific lessons in carrying over that we propose to insert in the course. We propose to teach science-method as an ideal of general application rather than as a specific kind of skill, and there is more to be said for the transfer of ideals than for the transfer of skills. Herein we are admitting that the education of the schools must be more and more an education in morals. We are saying that right living is scientific living and we are urging the use of science as a means to that end. We are urging that the application of the inductive method to the formation of the choices of social life is a long step toward social morality, and we are urging teachers of science to have a part in the taking of that step.

It is only by such use of the science-method, by applying it directly in school to the study of life-problems, that we may hope to secure for youth a scientific approach to the sex relations, the home relations, and to the larger economic and civic relations for which we are supposed to fit him.

Were I to act as critic of my own paper it would come to mind at once to challenge the workable qualities of at least the last part of the plan proposed; it would come to mind to say, as some principals have already said, that teachers will find difficulty in choosing those extra-laboratory problems which it is proposed to attack by the laboratory method. But remember that it is proposed to give only one-tenth of the time to this matter, and the capability of the teacher is, I think, in this matter a thing for the teacher himself to determine; to determine by trial and error. Surely the end in view is large enough to justify a little experimentation, to justify a little scrutiny of our main subject (which is adolescent life), to determine what things in it need the scientific method for their betterment, and to justify finally whatever departure from traditional methods may prove to bring us a little nearer than before to those high ideals which were set up long ago, and which our older methods still keep remote.

JOINT ROUND TABLE CONFERENCE OF THE DEPARTMENTS OF HIGHER EDUCATION, NORMAL SCHOOLS, AND SECONDARY EDUCATION

TOPIC: THE SIGNIFICANCE OF RECENT INVESTIGATIONS IN THE FIELD OF ENGLISH

A 1. THE LABOR AND COST OF COMPOSITION TEACHING: THE PRESENT CONDITIONS

EDWIN M. HOPKINS, PROFESSOR OF RHETORIC AND ENGLISH, UNIVERSITY OF KANSAS, LAWRENCE, KANS., CHAIRMAN OF A COMMITTEE ACTING UNDER THE DIRECTION OF THE MODERN LANGUAGE ASSOCIATION AND THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH

For two and a half years an investigation has been in progress to ascertain what are the proper laboratory requirements for the efficient teaching of English expression. English composition has been described as a "laboratory subject" for a fairly long time, and for an equally long time attempts have been made to teach it as such; but not even the teachers themselves seem to have fully realized that in undertaking to teach an old subject in a new way, it was, for success, necessary to establish an entirely new set of conditions. Of course, therefore, the general results of the new effort have been unsatisfactory, but it is not true that the laboratory teaching of English expression is a proved failure.

As a matter of fact, adequate laboratory facilities for the teaching of English expression have apparently never in any accurate scientific way been ascertained and provided for; if they have existed at all anywhere it has been as the result of a fortunate chance.

I doubt whether anyone has ever heard of such a thing, in fixing the conditions of English teaching, as the employment of a trained scientific expert in the subject to define those conditions. I question whether there is any other subject in the schools as to which it is so common for the ignorant and the untrained to assume to speak with authority, and what is worse, to impose their authority upon unfortunate teachers and still more unfortunate pupils. This is not wholly, I regret to say, owing to the survival of a few educational antiques, reared under the tradition that "everybody knows English," and therefore "anybody can teach it." There seem to be no small number of live, energetic, and efficient practical administrators, young in years and strikingly successful in their proper field, and no small number of teachers of other subjects than English, who assume that knowledge of English subjects and English teaching is a matter of intuition, and the natural intellectual heritage of any person of average common-sense provided that he does not happen to be an English scholar or an English teacher. The conditions of the teaching of English expression have therefore been determined partly by the traditions of a former age, in which there existed a now wholly outworn analogy with other familiar subjects, and partly by that sort of intuition known as guesswork. Some of the guessing has been done by English teachers themselves, but often their guesses have been based upon insufficient practical experience.

Now at last a national movement is under way to substitute for some of the guesses a body of carefully ascertained and incontrovertible fact. One thing is supremely important toward accomplishing the ultimate end—to bring about an ideal efficiency in the teaching of English. That is that every proposed or practiced means toward that end, every plan and arrangement and method relating to curriculum or subject or recitation, or to the individual work of the individual pupil, be subjected with the utmost possible care and accuracy to measurement by the calendar and the multiplication table, merely to ascertain how much teaching time it takes, or will take, to carry it into full effect. Simple as this seems, it is a thing that seldom has been done, by any committee or individual, from the Committee of Ten to the present time. A course is determined in terms of number of recitations and of points or pages to be covered, so that it may not impose upon an individual pupil more than a fair share of work; and that is as it should be. But there the mathematical process commonly ends; to ascertain the demand of the individual pupil upon the teacher's time, and to multiply that by the number of pupils, has not often been done; and when individual teachers have worked the problem out to its unhappy mathematical conclusion, they have not felt certain that their results held good in other cases than their own, and have accepted, or been compelled to accept, the dicta of their superiors, that the fault was not in the system, but in individual lack of skill. The study of efficiency of method in vocational teaching, as in boiler-making, must take account not simply of the quality of results, but of the time and labor necessary to secure a definite quantity as well as a definite quality of output. Is there any good reason why a teacher more than any other workman, or any other public servant, should "throw in" twice as much time as he is paid for, except that his interest in keeping up the quality of his output has led him into the habit of doing so, and that his employers are, of course, perfectly willing to let him keep on, even when they do not insist that he must?

The first undertaking of the Committee on Composition Teaching was to ascertain by the familiar method of averaging a large number of instances the time necessary to perform some of the most familiar operations. Incidentally, an equally large number of opinions of expert teachers with reference to the best methods of securing high efficiency were gathered, averaged, and tabulated. The results of this part of the investigation are set forth in detail in the committee's preliminary report; but some of the more important or interesting of them may be summarized as follows:

First of all, everybody agrees that English expression is a laboratory subject, or, as some now prefer to call it, a vocational subject; and that no vocational subject exceeds, if indeed any equal it in importance. Its two sides, training in writing, and training in

speaking, should have equal attention; tho in the past, writing has had the precedence. It is found that class hours do not afford sufficient opportunity for the inspection of work done. Such inspection of written work, if carefully made under average conditions, would require five or six hours a day of a teacher's time, in addition to a full assignment of teaching and of other duties.

Some, who perhaps do not wish to admit the truth, dispute this statement, but it can be disputed only by refusing to consider facts and figures. Others content themselves with saying, "Well, what difference does it make? The work is easy and it can be done at home, or at odd times when the teacher has nothing else on hand." The mistake that such persons make cannot unfortunately be confuted with figures, but only by actual experiment in doing this so-called easy work during hours that should be devoted to improvement or recreation. In advance of experimental tests devised for the purpose, such as may in time be made, the reports of the experience of thousands of teachers show that two hours a day of such work is the limit of full efficiency, and that three hours a day of it is beyond the limit of physical endurance for more than a few weeks. Under average conditions, therefore, a teacher seeking to conform to a recognized standard of method would have to load himself to two and one-half times his physical capacity.

Others say that nobody wishes any teacher to do more than a fair day's work, altho the average teacher is made responsible each day for the results of two and a half times a fair day's work. But if the work stops when the time is up, what becomes of the results? Everybody knows the answer to that question, and everybody likewise knows that until all the facts and conditions become public property, the teacher will be held responsible. The teacher also knows, and will be governed accordingly. What happens in various instances is set forth in the report.

Others make the pertinent but time-worn suggestion that the teacher should find a way of accomplishing two and a half days' work in one by some change or improvement of method. After more than thirty-five years of effort, nobody has yet succeeded in doing this. Much trouble and annoyance might have been saved if the comparative requirements of various methods and the comparative value of their results had always been accurately tested and recorded instead of confidently guessed at in the good old fashion.

A popular proposition of the present year is that the problem shall be solved by substituting oral for written training. As to this, there is need of further experimental test; but a considerable body of data is already in hand. First of all, oral training cannot entirely replace written training until the prophesied time when everybody shall dictate to a stenographer: the two kinds of practice should be, by common consent, equal. If made equal, half the load of theme-reading will be removed, in cases in which training has been wholly written; but the other half will still be more than the teacher is able to endure. Further, oral training seems to make a somewhat greater demand upon a teacher's time than written training does; and moreover it cannot be conveniently carried on at home and at night, or during recreation periods. Pending further investigation and experiment, it appears that even if training could be wholly oral, the teacher under average conditions must still do more than two days' work in one, or suffer the consequences.

Up to this time, therefore, the situation seems pretty nearly hopeless; especially to those who without being actual teachers of English are interested in the problem. These incline to pronounce a direct solution impossible, even if there were no limit to the number or physical capacity of English teachers; for the reason, as they say, that entirely apart from the teaching side of the problem, the average pupil cannot possibly spend a sufficient proportion of his time in English work to overcome the unfortunate influences to which he is subject all the rest of his time: in other classes, on street and playground, and in the home. The only remedy that these hopeless ones can suggest is that English expression shall be taught incidentally in all classes by all teachers of all subjects all the time.

They say that while it is obviously absurd to suppose that a pupil can be taught English expression in a five-minute private weekly interview with his teacher, in addition to his class time, which is all the time that he can have under present average conditions, it is equally absurd to suppose that he would be any better off with the time that he could have if there were two or three times as many English teachers; and that to have two or three times as many English teachers as at present is an obvious impossibility because of added cost.

But as a matter of mathematics, two or three times as many teachers would give the pupil five or six times the present individual drill, and that is not an absurd amount. Moreover, in written training such an increase in teaching force would make a certain part of the work almost seven times as efficient as it now is; a total gain of perhaps thirty-five times the efficiency, with only two points considered. We might, of course, assume failure, give up direct English teaching altogether, and thus save all the time and money now spent on it—for what better or more important purpose we need not discuss. But if, instead of giving up English teaching, we decide to keep what we have, and to supplement it by asking other teachers to help the English teacher out—or if under either supposition we ask other teachers to take all or part of the responsibility of teaching English—it will be necessary to provide competent and willing teachers, and to provide them also with time for the performance of this additional duty, and estimates indicate that it will cost just about as much to have the work done this way as to have it done exclusively and equally well by English teachers. Experiment may prove the contrary. Some hasty experiments already tried have failed to do so; but fair experiments will be welcomed by all English teachers; not so, I fear, by those who may be assigned to help them teach.

The crux of the general situation, from which up to the present time, after some generations of study, no way of escape by improvement of method has offered, is simply this: Under present average conditions, English teachers are assigned more than twice as much work as they can do. Some of them try to do it by working more than twice as much as other teachers do. This is wrong, because it disables them. Others do only what they reasonably can and let the rest go. This is wrong in another way, because it is an injustice to the pupil and a waste of his time, whether he is given less work to do, or whether he is required to go thru with a full performance without the aid and advice of the teacher. The committee report shows why this is true; it shows that under present average conditions of teaching English expression, workmen must choose between overwork and bad work; between spoiling their material or killing themselves; and the end for which the committee is striving is to place these painfully simple facts before the public so that the responsibility for the continuance of present conditions, if they must continue, may rest where it belongs.

It is, of course, natural to ask the question why, if there is more English work than English teachers can do, there should not be more English teachers. But the instant reply is that such a thing is absolutely and hopelessly impossible, because it would cost too much.

Perhaps so, but just what does English cost now, and what is the actual value of it, in relation to other subjects and the number of pupils concerned? The second question has received the answer that English is by all means the most important subject taught in the schools. But nobody has yet undertaken to ascertain, or to state just how much greater the importance is. If it is at the same time the most expensive subject, and the ratio of excess in cost is the same as the ratio of excess in importance, then it would seem to be reasonably certain that we cannot afford to spend any more money on English. But clearly there is here another field for statistical inquiry, and in this field also the committee has made investigation.

Of course, relative cost may mean either relative total cost, or relative pro rata cost for each pupil, or, as in business, some combination of the two, corresponding to fixed

charges and cost of materials; the latter varying with the quantity of the output. But of English expression as of no other vocational or laboratory subject, it seems to be true that the fixed charges are negligible; that there is no cost to be incurred until the pupils come; and that the cost therefore always bears a fixed relation to the size and quality of the output. The cost investigation is now far enough advanced to make the character of the results reasonably certain, tho subject to minor modification. It seems already established that the pupil-year cost of English is less than half that of any other vocational or laboratory subject, and indeed less than that of almost any other subject taught in the schools. Viewed from the other side, its total cost seems less than that of any other vocational or laboratory subject, tho apparently it registers twice as many pupils as any of the rest of them.

If, then, the pupil-year expenditure for the teaching of English expression were made equal to that of other subjects in its class, the English problem would apparently be solved. Present standards of cost were established before English became a vocational subject, and when it comes to a choice of sacrificing our English work, our English teachers, or a senseless tradition, and if it is true that English is the most essential and valuable of all vocational subjects, can anyone doubt what the choice must ultimately be, even if dictated only by the principles which govern any ordinary business investment?

A 2. METHODS OF AMELIORATION

JOHN M. CLAPP, PROFESSOR OF ENGLISH, LAKE FOREST COLLEGE, LAKE FOREST, ILL.

This report is one of the most important developments in the history of English teaching. The committee has earned the gratitude of every teacher of English in the country. As this document comes to be studied by school authorities, it will prove to have far-reaching consequences. We may be glad that it reaches public attention just at the time when the formation of the National Council has given English teachers an effective means of expressing their professional opinion.

The committee says that the instruction in English composition in colleges and schools is sadly deficient, because the teachers are required to attempt far more than they can do. If the schools are to do satisfactorily what they are now attempting, the number of teachers of composition must be doubled, at the least.

Now before our numbers can be doubled, we must convince a vast number of persons: presidents and principals; teachers of other subjects; trustees and school boards—a process which will take a long time, no matter how good our case. It is desirable, therefore, to find some means of amelioration under present conditions. Perhaps we can find ways of doing our work more efficiently with less labor than at present. In that case we shall be better off at once and permanently, and what demands we have still to make on the school boards will not be so great and will be granted sooner.

I believe that a substitution of oral exercises for at least half the written exercises now attempted in high schools would give real amelioration. (I shall consider merely the high school, today, because it is there, according to the committee, that conditions are most distressing.) I do not propose this substitution of oral for written composition as a mere makeshift, to be dropped as soon as the school boards see their duty. I urge it as a positive improvement of the work in composition. And the report of Professor Hopkins' committee is in no way more important than in this, that it demonstrates the futility of trying to teach composition by correcting themes. By forcing us to realize the disproportionate costliness of our exclusive reliance on writing, it will lead us all to remember what we have for a generation forgotten—the cheaper, more natural, more effective way of speech.

English composition holds a unique place in the curriculum. It has the right of way. All people agree that children must be trained to use their own language

adequately for the purposes of life. We English teachers have insisted for a generation that in the high schools courses in writing form the essential part of such training. We have lost sight of the fact that thruout life the demands for oral composition of an effective, coherent sort are at least one hundred times as frequent as the demands for written composition. We have taken for granted either that writing is the more important for the boys and girls, or else, what is even more amazing, that by teaching them to write we were teaching them also to speak. Now we find that we are not even teaching them to write.

But let us assume for the present that the purpose of high-school courses in composition is to train pupils to write. My point is that our instruction in writing will be more effective, and less expensive, if we make large use of oral exercises.

Let us consider the expense of effective instruction in writing by means of theme-correction. According to this report a high-school pupil should submit each week some 400 words of manuscript—I presume in two or three themes of 100 to 200 words each—which the teacher can correct at the rate of 2,000 words per hour. That is, the teacher can correct five themes per hour, spending twelve minutes on a 400-word theme. Now if composition is to be regarded as a "laboratory subject," as I believe it should be, isn't that taking a good deal of the teacher's time, in proportion to the benefit to the student? Should we not regard the director of a scientific laboratory who attended to only five students per hour as pretty slow? And what is the result to the pupil, even in well-equipped schools, of the teacher's toil over themes? Too often, even to those of us who have not been swamped by numbers, the results seem almost negligible. The same mistakes corrected day after day—blunders in spelling, punctuation, and idiom—and utter blindness, with all but the happy few, to the rhetorical principles of unity, emphasis, coherence, clearness, energy, which are discussed carefully in the textbooks, and explained day after day by the teacher in class. Progress in work which is so complex as the right expression of thought in language must of course be slow and gradual; the formation of habits is a tedious business. But the present rate of progress is unduly slow.

It is because the method, the exclusive reliance on theme-correcting, is unsuited to young minds. For one thing, there is too long an interval between the writing of the theme and its correction. When the paper comes back it is as cold, to the ordinary boy and girl, as yesterday's shortcake, and the teacher's corrections—no matter how careful—make little impression. In a class in oral composition the mistakes can be corrected on the spot, while the student is still warm from the effort of composition, and in the presence of his classmates.

Moreover, for the ordinary boy or girl, writing a theme is an unnatural exercise. They never do anything like it out of school. They hate to do it for us, even the good students. They go about it doggedly, or docilely, but nearly always passively; they have rarely any active wish to do it better. Do not misunderstand me. We must not give up the written composition. The boys and girls must learn to write, as they must learn the multiplication table. But we must find a better approach to the exercise; we must stir their will. Real composition, in life, is an active, eager process. The letters, reports, lectures, which these ordinary young people will have to write, later, when they write at all, will be matters of keen, perhaps oppressive interest, for which the languid theme-writing of school days gives no sort of preparation.

That oral composition does rouse an active interest in high-school students needs little argument here. Anyone who has tried it, with the same earnestness and care which is expended on written composition, knows the fact. In the first place, connected talking is less unnatural for young boys and girls than connected writing. They argue, narrate, describe, and expound fluently enough among themselves, out of school. They have been accustomed thruout their school life, even the timid ones, to recite their lessons orally. To talk 300 or 400 words coherently, on a subject familiar to them, is

far less of a task than to fit together the 200 words of a written theme. In the second place—and this is the main point—oral composition utilizes the influence which is most potent with boys and girls, the social spirit, the influence of the class.

When they have to talk to their classmates, even the dullards are excited. At this time the teacher's criticisms make an impression. More powerful still are the criticisms of their classmates, which form a most beneficial part of the class-exercise. Even tho, in crowded classes, there is not time for much oral criticism, there is the powerful influence, felt by the hardened spellbinder as well as by these young people, of the silent but immediate response of the audience, alike to poor work and to good work. Boys and girls who go on making the same mistakes, so long as only the teacher knows, are humiliated and spurred to improvement by public disgrace.

And the stimulus is not merely negative. Many who have never been able to do themselves justice in the strange exercise of writing get their first realization of what composition means when they have—quite unexpectedly perhaps—made a hit with their classmates with their wit or their shrewd sense. Thereafter the world is changed for them. Young people like to do stunts. The tactful teacher can get her pupils to practicing outside, trying to overcome bad habits of speech, enlarging their vocabulary, rearranging their material so as to use to the limit the three or four minutes on the floor. Once the class is started there is little difficulty in keeping them going, if the teacher is wide awake. The range of topics is practically as broad as for written composition: narration, description, exposition, composite narratives in which several students work out a story together, little debates, with teams of three or four on a side—the teacher can use them all. And instead of the docile creatures who take their medicine civilly she has a band of lively youngsters who like their work.

The point to be noted is that such oral exercises do not merely develop fluency of speech. These children are learning composition, practicing the art of putting words together to produce certain effects. The principles of unity, emphasis, and coherence, the qualities of clearness and energy, which mean so little in relation to the written theme, are very definitely realized when the theme is prepared for oral delivery to their classmates. Directness of statement, so hard to get in written themes, comes almost as a matter of course when the theme is prepared in oral practice by young people who are trying to say what they mean. And with directness comes also the feeling for style, the appreciation of the striking phrase which springs to the lips when the speaker is excited.

I do not wish to exaggerate. Boys and girls have not a great deal to say, either in writing or in speech. But they will come nearer self-expression, the ordinary boy and girl, when they speak than when they write.

Now it is in connection with the oral exercises that our young people can be got to writing. After the oral theme has been delivered let the student write it out, or write an addition, or an answer. When these written themes come in the teacher's task will be much less—she will not need twelve minutes for every 400 words of manuscript. Oral work alone, of course, will not teach composition, any more than will written work alone. Spelling, punctuation, variety of sentence-structure, some phases of paragraphing—these must be learned mainly thru writing. But they will be learned more easily, and more fully, if the students have come to feel a pride in doing well.

The transference of interest from oral to written work I have seen over and over again, among my own students, alike in college and in preparatory classes. By putting our chief emphasis on oral exercises, and having some of the oral themes written out, sometimes after delivery, sometimes before, we shall not only obtain good three-minute oral themes, 300 to 500 words in length, but written themes, not so many as at present but more valuable as studies in composition, because longer and better in form and content.

Now the immediate bearing of these remarks is that oral composition, well taught, takes much less time from the teacher than does written composition, well taught. In written composition the teacher must go over every pupil's work separately—twelve minutes, we are told, to every 400 words. A high-school teacher who has 120 students in written composition has of course twice as many as she can care for, even tho much of her work is as unconstructive as dishwashing, mere nagging, it seems to her pupils and to herself. But if she makes large use of oral exercises she can do something, even with as many as 120 pupils. In oral composition it is not necessary for the teacher to correct every theme in private. The students learn from each other. If the teacher gives every one of the 120 pupils a ten-minute private conference once a fortnight it will take only 600 minutes—ten hours—per week. That time can be employed sometimes in hearing the students rehearse in private speeches which they are preparing for the class, or which they have given, or for the special advice needed by each pupil, or in looking over with them the written papers, based on oral themes, which they have handed in during the fortnight. The teacher can economize upon the conference time, after the class is well started. Often two, three, or four students can be taken together, the group which is working on a composite story, or exposition, or argument. As the year advances more of this time can be used for discussion of the written themes.

The teacher cannot hope to be relieved of all theme-correction. But the number of papers will be reduced. Instead of 400 words of manuscript weekly from every student, let half the class write themes each week and half of them merely prepare the oral exercises. Moreover, let the teacher limit herself to five minutes for every 400 words, instead of twelve minutes, considering mainly points not covered in connection with the oral exercises. Five minutes apiece, for 60 themes, would fill 300 minutes, or five hours per week. Remember, I am considering not ideal conditions, but actual, what can be done right now, before the school boards have been made to see the need of increasing our working force. The overworked teacher, with ten hours of oral conference, and five hours of theme-correcting, would still be overworked, but her burden would be lighter. The ten hours' lively conversation with her boys and girls, no matter how fragmentary, how unsatisfactory, would be more stimulating to her pupils, and less nerve-racking for herself, than the long vigils with piles of hopeless manuscript.

Moreover, full relief would not then be impossible. The fifteen hours of oral conference and theme-correcting combined amount to not much more than three school periods per day. Six periods are usually required of a high-school teacher. If the school boards can be persuaded to increase the number of English teachers by 50 per cent—and that is not an impossible hope when this report of Professor Hopkins' committee has been generally studied—particularly when the good results of the oral work begin to appear—the strain on our high-school departments of English will be practically relieved.

The plan of amelioration here suggested does, it is true, increase certain demands upon the teacher. She must work out and maintain a careful schedule for appointments. She must be fertile in topics for the oral exercises, alert and sympathetic in using the brief time she has for criticism, in the class and outside. The administrative difficulties lessen, however, after the first year. And the alertness, the tact, the sympathy—these qualities she has already. She will be able to use them to better advantage when she no longer has to spend her nights correcting manuscript.

A 3. METHODS OF AMELIORATION

HARRY G. PAUL, ASSISTANT PROFESSOR OF ENGLISH, UNIVERSITY OF ILLINOIS, URBANA, ILL.

The investigation of the committee appointed by the Central Division of the Modern Language Association has emphasized and made more definite certain startling facts. Most of us had believed that teachers of composition are cruelly overworked; but each could support his contention with only comparatively limited evidence. Professor Hopkins has shown clearly from the testimony of thousands of men and women in all kinds of schools scattered from Maine to California how utterly inadequate are the present facilities for teaching composition, and how thoroly dangerous to the health, if not life itself, of the teacher of English is the superhuman task he is bearing. The startling facts of the case before us at once suggest the old but pertinent question, "What are we going to do about it?" Tho no one definite and entirely satisfactory answer, perhaps, may be given to this question, some suggestions may not come amiss as to how the teaching of composition may be made more effective and at the same time the instructor relieved of a part of his burden.

Among such possible suggestions the first and perhaps the most fundamental is that, before asking aid from others, teachers of composition should examine their own present methods of instruction, to see whether they are working with a minimum of friction and loss and with a maximum of efficiency and economy. We may well take to heart the decision of the Interstate Commerce Commission which some two years ago refused the petition of the railways for an increase in freight rates on the ground that the latter were not exercising all possible economy in their administration. As a thoroly desirable retrenchment in the teaching of composition I would urge that we re-examine our programs to see whether they need simplification. Many of us are overambitious, forgetting that it is better to do a few things effectively than a larger number indifferently. Before me are lying the programs in composition of several secondary schools, whose reach, it would seem, must far exceed their grasp. One of these programs outlines a course which if fully mastered would prepare students for teaching advanced composition in college. Let us welcome these ambitious programs when the schools have the ways and means for carrying them into effect; but let us not forget that for most of us the first and perhaps the last task is to teach our boys and girls to express themselves in simple but effective English, well enunciated or well spelled and well punctuated.

My second suggestion is that we disburden ourselves of some of our rhetorical fetishes dear as they may have grown thru long association. Book-makers and their traditions have loaded the teaching of composition with much lumber and junk. To illustrate this point, let us recall the venerable distinction between *as*—*as* and *so*—*as*, John is *as* tall *as* James, and John is not *so* tall *as* James. To teach a child such a distinction, which, so far as I find, is based simply upon a hypercritical tradition, is to rob him of time and energy needed for things more vital. A similar criticism is equally applicable to much of our teaching of the subject of usage. Far be it from me to disparage the careful study of the nice and effective use of language; but teachers sometimes forget that language is a growth, that frequently idiom may disregard sweet logic, and that we may waste precious time upon the study of usage.

Again, and this suggestion is especially applicable to conditions in those larger schools where the load of the teachers of composition is unusually heavy, we must recognize that all students in any given class do not require exactly the same treatment. I have in mind several large schools in each of which from one to three hundred entering students receive the same dose of rhetorical treacle and sulphur, regardless of their particular needs. Such a treatment, which results in an appalling waste of the teachers' time and is intellectually criminal toward the student, must give way to a careful classification of students, with special sections both for those who need little of this elementary drill and also for those

who prove either dull or illiterate. The training of these poorer students, I personally believe, should be intrusted to especially competent teachers.

Furthermore, we may make our teaching more effective by impressing upon students somewhat more forcefully than we have in the past the importance of their work in composition, in relation both to their other studies and to their future life. When a student has been brought to realize that he uses composition a hundred times a day, he has taken a long stride toward rhetorical righteousness. Pupils are surprisingly like their teachers in that they are perfectly willing to work and work hard at anything which seems to pay good dividends on the energy invested. This increased interest in the work is no less beneficial to the instructor than to the pupils, for the teaching of composition, like the handling of school discipline, grows incalculably easier and more effective when the master has secured the co-operation of his pupils. Many instructors might lighten their task very materially by striving more sedulously to cultivate in their students an appreciation of the immense practical value of this work in composition.

Another means of increasing the efficiency of the student in composition and consequently of diminishing the labor of the teacher, lies in the exercise of greater care in the assignment of theme subjects. More than once I have heard teachers shout three or four subjects for compositions just as the class was leaving the recitation room. It is easy to fancy how many of the pupils in such classes afterward went to the task of writing on these hurriedly assigned topics. Many of these pupils, it is fair to surmise, recalled a few hours before the next recitation that they would soon be asked to stand and deliver a theme. After a more or less prolonged search they discovered the assignment, scanned the list for the easiest subject, seized paper, then, like the housewife whose husband brings an unexpected guest for lunch on wash day, began to scurry about, seeking for almost anything that would satisfy their immediate necessities. They jumbled together whatever they had collected in their search, called the resulting mess a theme, and prayed that their offering might find favor in the eyes of the teacher. Such a picture of the way in which many a student prepares no small number of his themes is, unfortunately, all too near the truth. Fifteen minutes of careful preparation for writing a theme may save an hour of correction and be of infinitely greater value to the students themselves. "Out of the abundance of the heart the mouth speaketh." The first requisite of good work in composition lies just here—the student must have something he wishes to say. Time spent in discussing and developing with a class the topics for the next theme assignment pays large returns in increased interest in the subject-matter, in clearer thinking, and in more logical planning and more effective writing; and it also saves the theme-reader the drudgery inevitably following these haphazard plans of assignment, which encourage students to think once and write twice.

As a last suggestion toward greater economy of effort on the part of the teacher of composition I may suggest that we should insist more vigorously than some of us have done in the past that students should profit more promptly from our suggestions. In the teaching of composition, as elsewhere, we must of course recognize that "repetition is the mother of studies"; but my blood has boiled more than once as I have visited classes and watched students glance over carefully corrected themes, crumple them up, and consign them to the waste-basket. I have known teachers to go along week after week, correcting for students the same errors, even to the same misspelled words and obvious examples of careless grammar. The "cub-reporter" method of teaching composition, of which we have been hearing of late, may not be practical in most schools; but it affords good illustrations of the value of sharp, definite criticism which the young writer must make his own at once.

Such are some of the things which teachers of composition must lay closer to heart and practice more diligently; but when all these are said and done, our present force cannot hope to meet adequately the task of training students in composition. There must be additional help; but where shall we look for it? An old answer comes trippingly on the

tongue: "Every teacher should make every lesson an English lesson." To this proposal Professor Hopkins has summarized the following objections:[1]

This suggestion evidently rests upon the following assumptions:

That other teachers may fairly be required to add this labor and responsibility to what they already carry; in other words that they are not, like English teachers, already overworked; an assumption that is very doubtful.

That other teachers are competent to teach English; an assumption that has in familiar ways been often acted upon with unfortunate results.

That other teachers are willing to teach English in addition to their own special duties; an assumption that is in general contrary to fact.

We may grant, I believe, the pertinency of all these objections and still maintain, as Professor Hopkins himself later argues, that the situation might be much improved thru a more vital co-operation between the teacher of composition and his fellow-instructors. One of the first requisites of good composition is a respect for the decencies of grammar and for good spelling. Surely it is not too much to ask that school authorities insist that all teachers should strive to train their students in these fundamentals or yield place to other instructors who will. The teacher who fails to cultivate in his students this respect for language helps in accustoming them to regard good English as a mere Sunday dress, to be worn only in the composition class and to be exchanged for the customary negligee as soon as they have left the sanctum of the vernacular. But this matter of composition stretches far beyond the borders of grammatical correctness; it is fundamentally concerned with clear thinking, orderly arrangement of material, and accurate expression of the thought in mind. "What you need," I once heard an exasperated scientist say to a muddy-brained student, "what you need is a good, stiff course in composition." Possibly it would have been better for all concerned if by some process or other the student might have been supplied with a better brain; but the teacher was right—the boy did need a course in composition. He was wrong, however, in assuming that such a student should be turned over to the teacher in English, and that he himself had little or no responsibility in this case. Too frequently, indeed, English teachers have shown themselves all too willing to shoulder the entire responsibility of dealing with such cases. Let us remember, however, that much may be done by bringing home to all teachers a realization of their common responsibility and by meeting the complaint that students cannot write and talk well by asking what the critic himself is doing to improve conditions. Toward creating this sentiment of common responsibility for better English the teacher of composition may do much; but, be it added, the principal and superintendent may do even more.

But viewing from a somewhat broader outlook this whole matter of teaching the vernacular, I am tempted to call composition a habit rather than a school subject. To the majority of our students there comes almost as a shock the novel idea that ever since they could talk they have made use of composition hundreds of times every day. Many of these pupils have never realized that years before they entered the high school they were forming habits of composition. This very fact of the early formation of habits of composition is, I believe, a vital one that all too frequently has been overlooked or slighted by those intent upon improving the teaching of English. Most of us realize how thoroly ingrained are certain careless and slovenly habits of speech which come to the surface when we are off our guard. The best place for overcoming these defects is not in the high school but in the grades, when children are much more susceptible to training in language, when their habits of speech are much more plastic. The student who is captured in these early and more impressionable years of the grades can be more thoroly trained and with much smaller expenditure of time and effort than can his older brother in the high school. This contention is not a new one; nor is it an untried and impracticable theory. "The proof of the pudding lieth in the eating thereof and not in the chewing of the string." Thruout this country we may find a number of school systems that are spending much time and money

[1] *Preliminary Report on English Composition Teaching*, ninth edition, 1912.

in giving the students of their elementary grades effective training in English, especially in oral composition. Such training seems to me of inestimable value, for the students are not simply taking a course in English composition but rather are forming right habits of speech at a time when such habits may be best acquired. This contention for more effective training in English in the elementary grades does not in the least invalidate Professor Hopkins' plea for more instructors in the subject, but if anything goes even a step farther in the same direction; for to give such training requires a very material increase in the number and efficiency of the army of elementary teachers. I believe, however, that those who have gained this increased efficiency in their schools will agree with me that the results have more than justified the increased cost of instruction.

Indeed, twist and turn as we will this matter of gaining greater efficiency in the teaching of composition, one fact constantly recurs: better training in English demands a greater expenditure of money. This contention is strengthened when we consider another factor in the situation—the short term of service of most of our teachers of composition. We know that the average length of service among the English teachers of Illinois is not over two years and a half, a period scarcely long enough to be called a decent apprenticeship in the work. What statistics I have been able to get for other states indicate that conditions in Illinois, appalling as they seem, are better than those in very many other parts of the United States. Such a deplorable state of affairs, however, is not likely to be remedied till thru stiffer requirements for appointment and the consequent increase in pay fewer of our teachers shall regard their work as a makeshift for bridging over the time between the diploma and the wedding-ring.

In conclusion, I believe there is no one great panacea for ameliorating the condition of teachers of composition, tho much may be accomplished, I am confident, thru the means suggested above—thru a more careful and efficient organization and administration of our work in English; thru a rigorous insistence by those in authority that all teachers of all subjects shall be held more strictly to account for the composition in their classes; and, most important of all, thru greater attention to English in the elementary grades. In all probability none nor all of these methods would entirely solve the problem; but if they were efficiently carried out, they would undoubtedly do much good. What can we do to put them into practice? A great deal. The public and their representative the school board are perfectly willing to pay for things educational when they feel that the proposed training is worth while. It is for us to assist in bringing the facts before the public and the school boards and to help them to understand the situation. Before wise old Ben Franklin proposed to his fellow-citizens any of his numerous schemes for improving Philadelphia, he was wont to discourse with his neighbors on the bad condition of affairs, and to print articles in the local papers suggesting the need of certain improvements; in a word, he tried to arouse public sentiment. We may be lacking Ben's shrewd sagacity and may be destitute of his tact and cunning in handling a situation; but surely we have a good cause, and by our united efforts certainly can accomplish much toward ameliorating the conditions of the teaching of English composition.

B. DESIRABLE EQUIPMENT FOR ENGLISH WORK

VINCIL C. COULTER, HEAD OF THE ENGLISH DEPARTMENT, STATE NORMAL SCHOOL, WARRENSBURG, MO.

Perhaps the fundamental formula in education is the classic equation, "Mark Hopkins plus a boy on a log equals a school." The elaboration of this equation in the actual practice of the schools by the substitution of the average American school-teacher for Mark Hopkins and forty young savages for the one earnest boy has perhaps not been to the advantage of the schools, and, in order to preserve the equation, it has been necessary to increase the function of the log. The elaboration of this academic log into the modern school building

and its equipment has been a haphazard process, and the result is a surprise even to those who have been busiest in its accomplishment.

The one condition that has had most influence on the development of the knots on this log has been the almost universal adoption of the departmental plan of instruction in the secondary schools. The many obvious advantages of this plan have somewhat blinded us to its possible and actual disadvantages. One of these is that the division of the race lore which each child should learn into what may be taught in the somewhat technical classes in English, history, science, language, and mathematics, even with the addition of courses in cooking, typewriting, and millinery, leaves yet a remnant of valuable social heritage which no departmental teacher feels called upon to present; and, as a result, our students are like to fall between the stools. This observation would have no pertinence here were it not that it falls to the English teacher perhaps more than anyone else to meet the situation with saving counsel, and this fact must somehow affect the aim of English teaching and, so, any discussion of English equipment.

Another result of the departmental plan has been a demand for more highly trained teachers. This has been a gain for the schools, and it would perhaps seem wholly a gain. But, unfortunately, this "higher training" has too often taken the form of advanced training in special lines and has given us teachers who present their material from the standpoint of specialists in history, or science, or literature, rather than from the standpoint of specialists in the education of children. Specialization in English in our universities in the form of the preparation of a "contribution to knowledge," known as a Master's thesis or a Doctor's dissertation, usually has no relation to the preparation for efficient teaching in the schools. In fact, this specialization too frequently results in just so much useless lumber which the unfortunate possessor must get rid of before effective work can be done. This inadequacy in the training of the teachers for the schools brings them to their work unprepared to meet the actual problem of teaching and unable to take active steps toward the building-up of a working equipment of method and material. The actual work of the English teacher in the school seems to me to be further removed from the special work he has taken in the university by way of training than that of any other teacher.

Another result of the departmental plan has been the gravitation of the men to the departments of mathematics and of science. These men usually get larger salaries than the women who teach English, and they have more to do with the policy of the schools. When the principal of a small high school teaches a part or all of his time, he very seldom teaches English, but usually science. As a result, when there is money to be spent for equipment it goes for the science work. This is shown by some statistics presented before the first meeting of the National Council of Teachers of English and printed in the *English Journal*, January, 1912. Reports from 119 high schools show an equipment value of $26.41 per pupil studying chemistry as contrasted with $1.28 per English pupil. In 1910 these same schools spent $1.42 per pupil for science equipment and $0.17 per pupil for English equipment.

These figures are from a small group of schools. Statistics are not now at hand to permit a general statement of the conditions in the schools of the country as a whole. A joint committee of the Modern Language Association of America and the National Council of Teachers of English, of which Professor Hopkins of the University of Kansas is chairman, is attempting to collect data from a much larger group of schools, and, when these figures are in, a more significant statement can be made. But even if the preliminary statement be found to hold good for the larger group, the small equipment cost for each English pupil as compared with that of the science pupil is not in itself an indictment of the present distribution of funds. Such an indictment can be made only after it is shown that the comparatively liberal expenditure for science has resulted in a very inadequate provision of teaching force and equipment for English. In order that a definite authoritative statement can be made, I think it is pertinent here to urge the co-operation of each teacher present in the matter of getting returns from the schools.

But whatever the facts and whatever the conclusions deduced from them as to the comparative expenditure for the departments, it is certainly true that many schools at present are inadequately equipped for effective English work. Here let the addition be hastened that this paper is not written with a view to the large school with a well-equipped English department under the direction of an experienced man or woman, but rather with a view to the thousands of earnest teachers in the thousands of small schools who have the training of the great mass of the American people. These teachers need that you give them your experience, that you show them how to do their work more effectively, that you give them your moral support in their effort to get more adequate equipment. To this end a committee has been appointed from the English Council to draw up a report on "Equipment for School and College Work in English." It is hoped that this report may serve as a kind of manual to which teachers may refer for information as to cost and makers of useful material. According to a tentative outline the report will offer suggestions as to (*a*) exercise material for grammar and composition, and means of rapid duplication, (*b*) lantern and lantern equipment, (*c*) maps, charts, and pictures, and (*d*) library.

It would be of little value to the teachers if this committee should merely present a list of possible apparatus. Such equipment as is suggested should be for the purpose of meeting definite needs, and these needs have their basis in the aims of English teaching and the pedagogical problems involved.

The most insistent and, at present, most fully recognized need which the English teacher must try to meet is that for a knowledge and a workmanlike command of the mechanics of correct and effective expression. In order to meet this need a certain amount of rigid drill is necessary. Every English department, under the direction of its head or of the principal of the school, should accumulate a large amount of well-classified illustrative material for such drill. The average English course demands of the pupils entirely too much clerical work. For instance, the work in grammar and sentence structure requires a great deal of illustrative material. Many teachers spend a great deal of time dictating this to the class or writing it on the board to be copied. The pupils usually have to make two drafts in order to have it in form to present to the teacher with the required exercise. None of this has any value. It would be just as reasonable to send the class in wood-turning to the woods to fell a tree and get the timber and season it in order to teach them the use of the tools and the lathe. The vague feeling that the work required of themselves and their pupils is out of all proportion to the results leads some teachers to omit the needed drill. If, on the other hand, the teacher has printed lists of sentences illustrating the facts to be presented, he can hand them to the class, ask for markings, and look over the uniform printed pages with very much less work to himself and his pupils, and with better results.

A second generally recognized aim of English work is ethical, the presentation of ideals of conduct and character and the formation of correct habits of thought. This aim has been or may be met thru the medium of the classic literature usually read in the schools.

But there is a third class of aims, important but not so generally recognized. These are social and cultural. It is peculiarly the province of the English course to bridge the gaps in the curriculum, to unify the experience of the pupil, and to give him power to orient himself with reference to all his school work and the life around him. To accomplish these aims an equipment much more elaborate than the usual is demanded. And the second, third, and fourth divisions of the report have to do specially with this equipment.

As for the lantern, I was recently told of an English department with an equipment of two or three thousand slides which the teachers used to vitalize the work of the pupils and increase their range of ideas of men and events. But many teachers have not taken advantage of this useful ally, and when they desire something of the kind they do not know where to turn for it. The old course in literature which dealt almost exclusively with subjective material felt no need for such help, indeed could not use it, but with the coming of the much-to-be-desired emphasis upon the objective forms of literature it is indispensable. And

what may be said of the use of the lantern may also be said of the use of charts, maps, and pictures.

The most important element of the equipment for English work is, of course, the library, and the task of the committee in this connection is difficult. It is obviously impossible to present a list of books and ask that every school conform. It is also impossible to present an extensive list from which choice may be made. But the deplorable condition of many school libraries makes some kind of suggestion necessary. A few years ago I made some investigation of the reading done in a number of high schools. At that time it seemed to be the custom to read in class about four "classics" each year and require, as one principal expressed it, outside reading of between one and two books. Miss McNary, State Normal School, Trenton, N.J., reports that 227 students from 47 schools read, during their course, from 12 to 33 classics. Four years of the best reading periods of the pupil's life, and twenty or twenty-five books read under the supervision of the English teacher!

A recent investigation of the reading done during the year by 230 young men and women, of high-school age and older, showed that they had averaged more than five books outside of their school work. Two-thirds of these books were fiction. There was some reading of science and biography, and a very little of books of travel and essays on contemporary educational and social conditions. And among students from good Christian homes, young men and women who are active in church work, there were only two or three books of a religious nature reported. These students had unusual advantages in the way of library, but among their favorites occurred frequently such titles as, *Lavender and Old Lace*, *Freckles*, *The Rosary*, *Maurine*, and *St. Elmo*. Sixty reported among the books most enjoyed something from Wright. These students also read liberally from the *Cosmopolitan*, *McClure*, *Everybody's*, *Harper*, and *The Ladies' Home Journal*, but very little from the serious reviews, or the scientific and technical magazines. The reason given by one young woman for naming as the book she had enjoyed most a sentimental hero story was "because the boy was very poor and had a very hard time and took everything with a smile and finally got rich."

To meet this situation, to enable the student to carry over to his general reading the standards and methods of judgment acquired in the classroom, to develop a sense of social responsibility, to give some knowledge of the world in which he is to live on leaving school, and in a way to meet the present demand for vocational guidance—this requires a library equipment that goes beyond the classics of the old course. It demands a choice among books of travel, of contemporary biography, of social discussion, of description of the manner of life of all classes of people. And the English teacher is the one who must, for the most part, accumulate these books and guide the student in their use. For these reasons the report of the committee will try to make suggestions along these lines.

C. PROGRESS IN ARTICULATING SCHOOL AND COLLEGE ENGLISH

JAMES FLEMING HOSIC, HEAD OF THE DEPARTMENT OF ENGLISH, CHICAGO TEACHERS COLLEGE, CHICAGO, ILL.

The problem of articulation between school and college is the result of (1) the growth of free public educational institutions, and (2) the development of the practical as opposed to the traditional in English instruction. Formerly few went to college, and they were prepared wholly in schools which were conducted for the purpose. Little special instruction in English was demanded for entrance to college. But with the spread of higher education and the rapid development of public secondary schools, there came more pressing need of English training and a general demand on the part of the colleges that entering students satisfy certain requirements, which, unfortunately, were so varied as to make it impossible for any one school to prepare candidates for several colleges.

In this way it came about that various commissions and conferences were organized to secure greater uniformity. The oldest of these was the Commission of New England Colleges, which originated the plan of prescribing a list of English classics upon which entering students should be examined. In 1892 the conference on English of the Committee of Ten, which was appointed by the National Education Association, enlarged upon the work of the New England Commission. This conference had a good deal to say about training in composition but retained the required list of books as the basis of the examination. The following year, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, at the request of the preparatory schools, organized a conference on college-entrance requirements in English and invited two other similar associations to join it in securing uniformity of examinations. The conference and its complement, the College Entrance Examination Board, have continued to the present and have practically dominated the field. The last National Conference contained delegates from seven associations, every part of the country east of the Rocky Mountains being represented, altho more than two-thirds were from New England and the Middle States. One other important commission remains to be mentioned, namely, the National Education Association committee which reported in 1899. This committee urged that literature and composition be closely related, and it offered a list of forty books for each high-school year from which teachers were to be allowed to select at will. Both these features seem to have had marked influence on school practice.

At present about 90 per cent of the colleges print the reports of the National Conference as their admission requirements in English, tho a large number will permit substitution. Many colleges make special mention of grammar or composition or both, and a few prescribe a list of books of their own or even demand all those named by the Conference. There is distinct lack of agreement as to credits. It is reported that about one-third of the colleges require four years of English in preparation; another third will accept three but will credit four; while the remainder allow only three units of credit.

The last revision of the Uniform Entrance Requirements in English was made May 30 last. Considerable advance was made toward meeting the demands of the public high schools as indicated in many recent articles and addresses, in resolutions, and in bold ignoring of the Uniform Requirements. The report of the committee of the English Round Table of the National Education Association, which was placed in the hands of each member of the Conference, doubtless had considerable influence in shaping their course of action.

The principal changes made by the Conference may be summarized as follows:

(1) The requirement and examination in literature were definitely separated from the requirement and examination in grammar and composition. (2) The lists of books for reading and study were lengthened. High-school teachers will have more freedom of choice. (3) It was recommended that colleges set examinations which do not require certain specified books. (4) Pupils will submit certificates from their principals as to the books they have read in their high-school course. (5) Colleges are asked to provide means of testing candidates for entrance as to their preparation in oral English. (6) High schools are urged to maintain four-year courses in English. (7) The new requirements are put into force at once and will stand for five years.

It will be noted that the shorter list for "study" is retained, but with the pressure of public opinion will come, no doubt, the freer form of examination recommended, which is substantially that suggested by the New York teachers and which is now in use at Harvard. And with the standardization of secondary English will come ultimately the universal practice of certification and the elimination of entrance requirements in English altogether.

There is good prospect of marked advance in standardizing secondary English. The newly organized National Council of Teachers of English, which is already representative of the whole country, and of high schools, normal schools, and colleges in due proportion, has a committee actively engaged in gathering data for the preparation of a syllabus of

the secondary English course. With this committee are now to be associated three others. These are the committee of the English Round Table of the National Education Association, the Committee on College-Entrance Requirements of the Public Speaking Conference of the New England and the North Atlantic States, and a subcommittee of the National Conference on Uniform Entrance Requirements in English. A body thus constituted would seem to be perfectly qualified to formulate the best practice of American high schools in teaching English, and its report, which will be made available to all thru the office of the national commissioner of education, ought to command wide attention because of its intrinsic authority. By a proper interpretation of the conditions out of which the recommended courses have grown, it will be possible to assist high schools in organizing activities adapted to the needs of individual schools and, at the same time, to set up standards of attainment which colleges can accept in lieu of all other prescriptions and requirements.

D. PROGRESS IN STANDARDIZING THE MEASUREMENT OF COMPOSITION

ERNEST C. NOYES, TEACHER OF ENGLISH, FIFTH AVENUE HIGH SCHOOL, PITTSBURGH, PA.

At the suggestion of Mr. Hosic, I wish to call your attention to another recent investigation, which has for its purpose, "to establish standards of composition that will make it possible to compare the work done in one school with that done elsewhere and to make it difficult for mere opinion to control so much of our schoolroom practice." I refer to the attempt of Professor Thorndike and Mr. Hillegas of Columbia to construct a concrete scale of measurement for composition.

In nearly every form of human effort except teaching the efficiency of different methods of procedure can be and is tested by results. That school of medicine whose practitioners cure the greatest proportion of their patients quickly becomes the most popular. Comparison of the results gained by automobile delivery with those gained by horse and wagon is driving the horse from our streets. Even in the humble field of poultry-raising comparison of the number of eggs laid in a month by the same number of hens under different systems of feeding has proved what kind of food will produce the greatest results in eggs. It is only in teaching, and this is especially true of the teaching of English, that when our favorite theory is subjected to the test of pragmatism, "Does it work?" we must answer, "We don't know positively, but we hope it does, or we think it ought to work."

Now just as the study of methods of business has produced the new application of science to industry known as scientific management, so the demand of the age for the measurement of results is bringing forth a new science of education, based upon exact measurement and judgment by ascertained facts. As Professor Thorndike has said:

> It is fruitless to keep only the debit account of time and money expended, of courses of study and methods of teaching, if we leave the credit account of results achieved, the products of education, vague and uncertain.

The need of measuring our results requires no demonstration; but the keeping of an accurate account presents a problem of peculiar difficulty. If education has lagged behind business in testing theories by results, it has been because there have existed no adequate means of gauging skill in solving arithmetical problems, knowledge of Latin, or ability to write English.

To be sure, we have for decades attempted to measure composition by percentages or letters, or by vague adjectives like good, fair, or excellent. But can any teacher tell just where a composition ceases to be worth 90 and is worth only 85, or when it rises to 95? And will any teacher assert that the difference between 50 and 60 is the same as that between 90 and 100? Yet in any valid scale ten units should represent the same step in whatever part of the scale they be taken. If we abandon the percentage system

for letters and mark A for excellent, B for good, C for fair, and so on, we find it equally hard to draw a line and say that all paragraphs on one side of this line are fair and that all on the other are poor. In addition, we are compelled with the letter system to give the same mark to compositions varying greatly in merit. This inaccuracy has caused many schools to add + and − signs to the letters, but who can state the point at which a composition falls below B− in merit and yet is worth C+? Furthermore, whatever system is used, all of us know that teachers working independently will scarcely ever grade a set of compositions alike.

In estimating the merit of specimens of composition, teachers probably show greater differences in judgment than they exhibit in grading pupils' performances in any other subject. Tho the extraordinary complexity of the facts to be observed and estimated in forming any judgment, together with the variable emphasis placed by individuals upon vocabulary, sentences, paragraphing, thought, etc., makes uniformity of judgment difficult, it is not impossible. Differences in the rating of the same paper exist not because teachers disagree about what constitutes merit in composition. On essentials there is substantial agreement in theory. The chief difficulty is the vagueness with which standards have been defined. When we say of a boy's composition that the sentences, paragraphing, and progress of thought are *good*, we are as inaccurate as we are when we say it was hot here yesterday. If we say the thermometer stood at 90° here yesterday, we have measured the heat by a scientific standard which has the same meaning in Boston as in Chicago and by which we can compare the heat in one place with that in another. On the other hand, if we say that the composition is worth 90 per cent, tho we have measured it after a fashion, the standard does not have the same meaning in Boston as in Chicago. It is not the same with any two teachers, and it is more worthless for purposes of comparison than 90° Fahrenheit and 80° Centigrade would be; for the two temperature scales can be reduced to a common basis, but no two percentage scales have any common basis. Our present methods of measuring compositions are controlled too much by personal opinion, which varies with the individual. What is wanted is a clear-cut, concrete standard of measurement which will mean the same thing to all people in all places and is not dependent upon the opinion of any individual.

This want, Professor Thorndike and Mr. Hillegas have attempted to supply by the construction of a series of samples of composition with which specimens to be measured may be compared. This series of samples, each differing from the preceding by an equal degree of merit, makes a uniform scale of measurement *applicable universally*. In applying this scale a specimen of composition to be valued is compared with one sample after another till a sample is found precisely equal in merit, just as in determining the note sounded by a tuning fork we had found, we might compare it with one note after another of the musical scale sounded on a piano till we could fix its proper place.

Tho at first thought it may seem impossible to construct such a scale for composition, the means by which it has been done is as simple as it is sound, namely, the opinion of a considerable number of competent judges. Certainly, the test that has determined what books are classics and that lies behind the principle of good use in language is the best that could be devised for determining a scale of measurement for composition. Mr. Hillegas' scale represents the rankings of several hundred carefully selected judges, who were asked to arrange a large number of samples of young people's composition in order of merit. From their rankings of this large set, the scale of ten samples, ranging in value by equal steps from 0 to 937 units, was derived by applying the theory that "differences equally often noticed are equal, unless the differences are either always or never noticed." That is, if 75 per cent of the judges noticed that sample A was better than sample B and the same number noticed that B was better than C, it was assumed that the difference in merit between A and B was exactly the same as that between B and C, or that the difference between A and C was exactly twice the difference between B and C or B and A. In fact, when two samples were found such that 75 per cent of the judges agreed

in calling one better than the other, the difference in merit between them is just the difference used as the unit in this scale. The zero point is shown by an artificial sample produced by an adult who tried to write very poor English.

Of course, such a scale is open to some objections, notably that the samples it contains, which vary in length from five to ten printed lines, are too short to test sustained power or skill in arrangement of the larger units of composition. Some may say that judgment of composition by the use of such a scale is too mechanical. Still, what is essentially the same method, comparison with samples of fixed value, was recommended by no less sensitive a critic than Matthew Arnold when he advised the committing to memory of fine passages of poetry that they might serve as touchstones by which to test the value of unfamiliar verse.

This scale marks a great advance toward precision in the rating of composition. It will enable any teacher to correct his individual judgment by reference to the combined opinions of many good judges. It will afford him a ready means of determining the relative progress of pupils under different systems of instruction so that when asked, "Does this theory work?" he can say, "Yes" or "No" with conviction. Even mental standards will gain in precision as teachers become accustomed to a uniform standard. Composition equivalent to 6 on Hillegas' scale will be a much more accurate description than fair; just as our familiarity with the thermometer has made 60° a more precise description than chilly.

It is to supervisors, however, that this scale will be of the most value. By it they will be able to compare classes of the same grade in different schools, in different cities, or under different teachers. Such a scheme for measurement will also afford accurate definitions of the standards required for promotion. Employers will find in it an accurate means of defining the degree of excellence expected in an applicant for a position. Even the pupil may profit by studying such a scale, for it will show him just what he is expected to accomplish and enable him to measure his own progress.

In short, Mr. Hillegas has shown that it is possible to standardize our measurement of composition and to make it precise. Soon we shall think it as ridiculous to measure compositions by "excellent," "good," and "fair," as to measure distance by units like "as far as a man can jump." This investigation signifies the dawn of the day when the incapable teacher shall be unable to take refuge in the belief that no one can measure the results of his work; when the thoughtful teacher may be able to tell by accurate tests whether his theories are true or false; and when all teachers may feel that their gradings are just and uniform because based on a definite, fixed standard.

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Samuel Avery, chancellor, University of Nebraska.....Lincoln, Nebr.
Vice-President—J. H. T. Main, president of Grinnell College.....Grinnell, Iowa
Secretary—Arthur R. Mead, University of Minnesota.....Minneapolis, Minn.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The meeting of the department was called to order at 2:30 P.M. by the president, Samuel Avery, chancellor of the University of Nebraska, Lincoln, Nebr., at Mandel Hall, University of Chicago, Chicago, Ill.

In the unavoidable absence of the secretary, Arthur R. Mead, Edward C. Rosseter, district superintendent of schools, Chicago, Ill., was made secretary *pro tempore*.

James R. Angell, dean in the University of Chicago, Chicago, Ill., read a paper on "A Suggestion of a Method for Improving the Relations of Colleges and Secondary Schools," which was followed by a discussion by Charles A. Blanchard, president of Wheaton College, Wheaton, Ill.; R. B. von Klein Smid, professor of psychology and education, De Pauw University, Greencastle, Ind.; and John A. Wood, superintendent of city schools, South Bend, Ind.

The second paper was presented by Charles W. Dabney, president of the University of Cincinnati, Cincinnati, Ohio, and was entitled "The Municipal University and Its Work."

W. W. Boyd, dean of the College of Education, Ohio State University, Columbus, Ohio, discussed this paper.

George F. James, dean of the College of Education, University of Minnesota, Minneapolis, Minn., read the following paper: "The Relation of the State University to Other Parts of the System of Public Instruction."

This paper was followed by a discussion by Edward C. Elliott, professor of education, University of Wisconsin, Madison, Wis.

On motion, the chairman was authorized to appoint a committee of five on nominations to report at the next meeting.

The meeting then adjourned.

Edward C. Rosseter, *Secretary pro tempore*

SECOND SESSION—Thursday Afternoon, July 11, 1912

The department was called to order in Mandel Hall, University of Chicago, at 2:40 P.M., President Avery in the chair. R. B. von Klein Smid, professor of psychology and education, De Pauw University, Greencastle, Ind., was appointed secretary *pro tempore*.

Samuel Avery, chancellor of the University of Nebraska, Lincoln, Nebr., delivered an address on "How to Reach the Individual Student in Our Colleges and Universities."

This was followed by a report by the secretary, Arthur R. Mead, De Pauw University, Greencastle, Ind., on "How Our Colleges and Universities Maintain Personal

Relations with the Individual Students: A Report of an Investigation under the Auspices of the Department of Higher Education of the National Education Association."

This report was discussed by Thomas A. Clark, dean of men, University of Illinois, Urbana, Ill.; R. B. von Klein Smid, professor of psychology and education, De Pauw University, Greencastle, Ind.; and Raymond M. Hughes, acting-president of Miami University, Oxford, Ohio.

Upon a call by the president for general discussion, President Blanchard, of Wheaton College, spoke in behalf of a greater care for the moral welfare of students.

"The Report of the Committee on Policy of the Department of Higher Education" was presented thru the chairman of the committee, G. W. A. Luckey, professor of education, University of Nebraska, Lincoln, Nebr. This committee was first appointed in 1911.

On motion, the committee was continued thru the year 1912 to carry on further investigations.

The Committee on Nominations reported as follows:

For *President*—W. O. Thompson, president, Ohio State University, Columbus, Ohio.
For *Vice-President*—Guy Potter Benton, president, University of Vermont, Burlington, Vt.
For *Secretary*—C. A. Duniway, president, University of Wyoming, Laramie, Wyo.

On motion, the report was unanimously adopted.

The meeting then adjourned.

R. B. von Klein Smid, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

A SUGGESTION OF A METHOD FOR IMPROVING THE RELATIONS OF COLLEGES AND SECONDARY SCHOOLS

JAMES R. ANGELL, DEAN IN THE UNIVERSITY OF CHICAGO, CHICAGO, ILL.

We have survived several critical stages in the development of the relations between colleges and secondary schools, and compared with some of the periods thru which we have passed, the present is a time of calm and peace. As we look back, we recognize the period of undisputed collegiate ascendency, the schools figuring as feudal dependencies. We remember vividly the more recent period of school rebellion and open warfare upon the domination of the college—a period to which there is occasional reversion. We are, in many parts of the country, just passing out of the era of armed neutrality into one of mutual confidence and respect. This paper has as its aim to present the contention that in those sections of the country where most progress has been made in the establishment of cordial relations, we have come substantially to the end of merely mechanical adjustments and that our next forward movement must be on the basis of more intimate personal contact on the part of the men actually conducting the work in the two classes of institutions concerned.

I violate no confidences in telling you that for many years the colleges conceived it to be their function to dictate to the schools not only what they should do, but also how they should do it. Some colleges have not

even yet awakened from this dream. Many private schools do not wish them to be awakened. They exist for no other purpose than to supply grist for the collegiate hopper, and to be told that they must, themselves, decide in large measure what quality of grist to offer is to affront the very logic of their being. On the other hand, the overwhelming majority of schools have very definite ideas of what they wish to accomplish and equally specific impressions as to the desirable methods for attaining their results. To have the colleges tell them that they must do thus and so is to precipitate a very unphilosophical state of mind in their managers.

As a result of this situation, the last few years have witnessed a very interesting process of adjustment, as a result of which the progressive colleges have attempted to make their entrance requirements more flexible, thus enabling the schools to meet the demands of the colleges without serious invasion of their other obligations.

Viewed from the outside, the history of this movement might appear to record a mere surrender on the part of the colleges to the obstinate demands of the schools, and not a few college men have so viewed it, to say nothing of an occasional bellicose school man, whose sensibilities have been jarred at one time or another by a careless expression of collegiate complacency. But, fundamentally, the movement has represented a much deeper process. It has arisen from an increasing consciousness of the inevitably unitary nature of the educational situation. No institution is so isolated that it may wholly disregard the educational currents flowing all about it and certainly no college which receives its students from any considerable number of schools, as is now universally the case in our influential colleges, can possibly entertain longer a view of its functions which makes it sole arbiter of the work to be done in the schools. Even if the view be entertained, it is flagrantly at variance with the facts.

Thus far, however, progress has for the most part consisted in a modification of the specific requirements put upon the school or in a change of the means by which students pass from the school to the college. Thus, we have eliminated Greek and modified the amount of Latin, we have devised a system of certification, and various other ameliorations of the entrance examination system. And still a very real problem exists and one which in the writer's opinion calls for quite a different kind of adjustment, at all events for a distinctly different type of treatment in its solution.

It is entirely possible for the authorities of a school to agree with those of a college that the graduates of the school shall bring to the college such and such preparation as described by title and amount. The school may supply competent instructors and attempt to carry out its part of the program with scrupulous fidelity. Nevertheless, when its graduates appear in the college classes, they may fall considerably short of the attainments which the instructor in charge believes that they ought to possess. This situation commonly leads to exasperation and mutual recriminations, in

which students and instructors participate with equal fervor. Such situations, I am convinced, often originate from the almost inevitable disparity between a program as laid down on paper and the same program as embodied in the actual practice of a school or college. The writer has amused himself of late in checking up with the prospectus of the school the results actually attained by the boys and girls on completing the several grades. The disparity has often been grotesque and has never failed to be at least noticeable. If this be true in the elementary branches, where the desiderata are simple and easily formulated, what may we not expect when we come to more advanced work? Naturally, one does not allege nor assume that serious failure to articulate is a universal feature of school and college adjustment, but simply that it often occurs and under present conditions may reasonably be expected.

The immediate steps necessary to initiate a remedy consist in a more intimate acquaintance between the teachers of the two types of institution, and a more accurate insight on the part of the officers of each type into the actual conditions surrounding the other. The ignorance on the part of college teachers of the real conditions in the schools from which their pupils come is often both dense and ludicrous. They tend to assume that the schools of today are like those in which they themselves were educated ten, fifteen, or twenty years before. They tend to overlook or forget the great variations in the conditions which different schools have to meet. They are oblivious to the peculiarities of the small town school as compared with the city school, the public school as compared with the private academy. They tend to magnify the significance of their own methods and educational prejudices in partial or total disregard of the reasonable claims of other ideals. All this makes for friction, for educational provincialism, for a decadent type of conservatism.

School men on their part are guilty of equally serious sins and shortcomings. If a boy goes to a college and fails in some of his work, they forthwith accuse the college of having put the boy under incompetent instruction—which is sometimes undoubtedly the fact; or they charge that the administration has been lax in not pursuing the lad more energetically and thus preventing his failure; or they charge that impossible demands were made upon him. Now, one or all of these charges may be well founded, but often they are quite baseless. Despite the most conscientious efforts of the college authorities, the boy may have been lacking in sufficient moral stamina to withstand the temptations presented by a first removal from home supervision, or he may have fallen heir to an instructor who rode a hobby of a different habit from that mounted by his high-school teacher, and as the animals were bound in different directions, the result has been, in consequence, disastrous. I regret to add that I have met college men who evidently entertain as a fundamental element of their working creed a belief in their own unqualified superiority to school men of

whatever variety; and conversely, I have met school men who not only regard college teachers as generically conceited jackanapes, but also as pettifogging incompetents, in all that concerns school work. Now, these sentiments, as far as they exist, do not contribute in any vitally helpful way to solve the difficulties of adjusting school and college relations.

There is no doubt a measure of truth in the old saw that familiarity breeds contempt. So far as concerns things worthy of contempt, it is fortunate that this is so. But the formula fails to add the supplementary truth, that familiarity also breeds confidence and sympathy and mutual understanding. It is the serious belief of the speaker, based partly upon actual experience at the University of Chicago, that few more valuable steps can be taken at this juncture than the devising of systematic methods for insuring the exchange of visits of inspection by the teachers and administrative officers of schools and colleges.

The deans and instructors in charge of college Freshmen ought to be obliged to visit every year, at least every other year, a certain number of secondary schools from which their students come. These visits should involve a stay of sufficient duration to allow full and frank discussion with the school men of the exact conditions faced by the school, and a thoro appreciation of the ideals and methods represented in its conduct, especially that part of it in which are being laid the immediate foundations of the college teachers' own personal work. Such visits should not be made primarily in the spirit of critical inspection. Many collegiate institutions have their special inspector, whose duty it is to pass critically on the school and its work. These visits of the teaching staff should be conceived in quite a different spirit. They should be informational in purpose, should serve to put the college instructor or the dean in immediate personal contact with the problem faced by the school-teacher who is training students for the work of the college.

No doubt the immediate results of such visitation on the mind of the college visitor frequently would be one of despair. But more often it would be one of vastly increased respect for the success attained by the school and it would with rarest exception be one of widened knowledge, sympathy, and appreciation.

On the other hand, the schools ought to send some of their teachers at least once a year into the college classes which continue the work begun in the schools. It would do the principals and even the superintendents no harm to come too. Indeed, teachers ought to go now and then into other good high schools and academies to observe how their own problems are met elsewhere. If they do not see things worthy of imitation, they are fairly certain to see some things which ought to be avoided, and in any event they will appreciate, with an accuracy that no other method affords, just where difficulties are most likely to be encountered by their own pupils.

Inasmuch as practically all high-school teachers are college graduates,

we might suppose such visitation of colleges would be egregiously superfluous. But there are at least two highly important reasons—to mention no others—why this is not the case. In the first place, even college methods of teaching change, and in some departments the changes in the last half-dozen years have been little short of revolutionary. In the second place, and much more important, is the fact that the work of a class viewed as a member of the class going over it for the first time is an absolutely and utterly different thing from the same work viewed as a spectator engaged in teaching related, or even identical, material. Here, again, the visit should be long enough to enable the securing of satisfactory interviews with the instructors and an adequate estimate of the general conditions maintaining in the institution.

Two practical difficulties may suggest themselves in the execution of a program of this character. One is geographical. Some colleges are relatively remote from the important schools and some schools might find it difficult to reach more than one collegiate institution. The other difficulty is administrative and fiscal. To induce the college and school authorities to grant the necessary absences, and much more to foot the bills, is likely to be difficult. But very few things which are worth while are available without some struggle. The question is whether the results gained would justify the cost. The speaker has absolutely no question as to this.

During the past year the University of Chicago has had as its guests in the elementary classes a large number of teachers from the secondary schools. They were invited to come whenever they could, to stay as long as they wished, and to report to their principals and to our annual conference any criticisms or suggestions which they had to make on our methods. The university enjoyed their presence, and found such criticism as they were willing to offer both useful and just. We believe that in almost every case they went back strengthened for their own work and certainly more accurately informed as regards ours.

Next year we are planning to return the compliment on their invitation and send our men to visit the schools. We have no doubt that we shall profit in a great many ways by this interchange. This type of visiting has been done on a small and impromptu scale for a long time, but we hope, by doing it more systematically and regularly, to build up a reliable body of information by means of which the schools and the university may understand one another better.

In the great commonwealths where strong state universities are found, the possibilities of this intimate personal interchange ought to be very large. But there is nothing to prevent the essential features of the plan from being put into operation in all parts of the country, and the speaker repeats that in the direction of this more immediate personal contact and intercourse on the part of the schools and the colleges is in his judgment to be sought the next important step forward in the cementing of their common interests.

THE MUNICIPAL UNIVERSITY AND ITS WORK

CHARLES WILLIAM DABNEY, PRESIDENT OF THE UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO

It has frequently been said that the city is the unsolved problem of the democracy. This is true, in a measure, but we should not be discouraged, for Americans have only recently taken up seriously this problem of the city. In the past we have attended to our private business and let the saloon-keepers and the bosses run our cities for us.

There was, of course, an explanation for this attitude. In their struggle to conquer a new continent, our pioneer fathers, who by themselves established homes in the forests or on the prairies, developed individualism to a point that has made it difficult for their children to learn to co-operate with their fellows, as city dwellers must do. The citizenship of our towns, made up largely of country people trained in these individualistic methods, is naturally opposed to co-operative plans of living and working. It has taken them several generations to find out that the methods of the pioneer in the forest are not the methods to be followed by his grandson in the city. Thus it has come to pass that, outside of a few eastern cities, we have almost no experienced city residents or trained leaders in municipal affairs. All the original laws, for town as well as country, were made to fit these primitive rural conditions. Thru the legislatures our cities are to a great extent still governed by the rural districts in accordance with the individualistic principles and ideas of country people. City people are only just beginning to assert themselves and contend for home-rule.

And still few citizens of the cities possess the civic mind. With many city dwellers the curbstones around their home lots still seem to mark the limit of their civic interests. Where organized at all, they work only thru neighborhood associations for little local improvements. As a whole, the citizenship of our cities has not yet developed the larger mind which sees the city as one great co-operative society. From the civic point of view, the first problem of the schools is to teach people how to live and work together, that is, to co-operate in local, political, and economic matters as they do in business. Thru the public schools this is now being done to a greater degree than heretofore, and the people are gradually being educated to solve their own problems in accordance with the necessities of city life as opposed to country life. The universities also are beginning to train men to study the city's problems and to do the city's work. Upon them rests the more serious part of this task, the training of the administrators, economists, engineers, and sanitarians.

Since the applications of science to government and industrial life have become so extensive, it is now necessary to educate men for service in an increasing number of new professions. Fifty years ago there were five learned professions; now there are more than fifty and new ones are

developing every day. Especially in the cities is this demand for trained men and women growing at a rapid rate. The city now needs hundreds of trained persons for its higher scientific and social professions where the country needs ten. Most of these must necessarily be educated in their home cities. Thus it has come to pass that the city must have its own university, and that the university of the city must be a different kind of institution from the private or state university. The municipal university is justified by the needs of the city itself.

How then shall the city train its public servants? Shall it rely upon state and private institutions for this service? If it does, only the sons and daughters of the well-to-do will be benefited. To exclude the poor from the opportunities of this higher education, or to train them at the bounty of the wealthy, is repugnant to our democratic ideals. It is well enough for private institutions to give scholarships to promising poor scholars, but it is more American to provide the means of instruction and training at public expense, and so enable all qualified youth to use them freely. If equality of opportunity is the fundamental principle of our institutions, we must provide opportunity for the poor, as well as for the rich, to get the higher, as well as the lower, education. Experience shows that the city must look to its own young men and women to do its work, for only thus can it get all the workers it requires.

The municipal university should thus be the head of the city's system of schools and its entire intellectual, scientific, industrial, and social life. As the brain commands and ministers to all the organs of the body, so the city university should supply stimulation and direction to all parts of the body politic.

While the first duty of the municipal university is to train men, its peculiar relations to its supporting people create for it a rare opportunity for active institutional service. If city problems are still the greatest problems of the democracy, where, if not to its own university, shall the city turn for help in the solution? Indeed, is not our entire system of higher education on trial, when thus hauled out of its isolation and set over against the needs of a busy, swarming center of population like the modern city? Are not universities for the promotion of better living as well as for learning and research? The university should not be a thing apart any more than the common school. Like the common school, it exists to promote the life of the common people. Twenty years ago "university extension" was the fashion. The very name "extension" implied that the university was confined and needed to be set free to serve. Has "university extension" extended the universities? Not very much, I fear, but the service of the people is rapidly extending some of them. Some of the great state universities especially have manifested recently a growing consciousness of their duty to the public. The services of the University of Wisconsin, and others of that type, are splendid illustrations

of what can be done by such institutions to promote the agricultural, industrial, and political, as well as the educational interests of their states. The municipal university, owing to the closeness of its relations with its constituency, can perform similar kinds of public service, which would be impracticable for state and private institutions. Perhaps, after all, it is the fires of our modern city life which shall remove the dross of our traditional academic inheritance, leaving the pure gold of truth to enrich our social democracy.

Co-operation, the characteristic method of the democracy, becomes, thus, the working plan of the city university. By reason of its proximity it has a rare opportunity by co-operating with the various local establishments, the public schools, libraries, museums, social settlements, hospitals, and factories, to train men to serve the practical needs of the community. The educational principle involved, the mutual helpfulness of theory and practice, is the only sound one on which to build any institution for human betterment.

In putting emphasis on this phase of the municipal university's work, we do not, however, overlook the other side. Professor Tawney has well said:

> As the city does not exist for the sake of the university, so the university does not exist merely for the sake of the city. Neither of these formulations of the matter conveys the whole truth of this vital relation between city and college. The underlying presupposition of the city university is not a municipal theory of university values, but rather an educational theory of all municipal values. The ultimate apology for the existence of the city is the education of men and women. The ultimate criterion of values in city institutions, city customs, and city affairs is the educational criterion. The important question to be asked in any municipality is not, "Are you growing more populous and more wealthy?" but rather, "Are you producing men?" The city really is, and actually ought to be, one vast educational institution, in which no man can live and not know with what great destinies knowledge has come into the world, in which every life shall be touched by the torch from the altar of truth, and in which no laws, customs, or institutions will be possible which are inconsistent with this, the city's chief business.

This we believe to be the foremost methodological principle of the city university, that the city, as a whole, exists with the university as a part of it for no other ultimate reason than that all men who dwell in her corporate limits and influence may be strong and true. The purpose of the city university is to teach men the truth that they may be effectively free.

Having been requested by the committee to discuss this subject, and there being no other municipal university with which to illustrate the principles and proposals here made, I am compelled to draw my illustrations from the University of Cincinnati.

This company of school men will at least be interested in the system of training teachers and promoting the schools carried on by the Board of Education and the University of Cincinnati in co-operation. The College for Teachers is under the joint management of these two institu-

tions, which work thru an executive committee consisting of the superintendent of schools, the president of the university, and one member from each board. The college receives financial support from both. The College of Liberal Arts of the university, the Kindergarten Training School—an independent institution—and the Art Academy supply a large part of the instruction for the several programs of the College for Teachers. The Board of Education gives the use of four of its schools, changed each year, for practice, and also the assistance of its supervisors, who co-operate with the professors of the college in training the candidates. The plan has been in harmonious and successful operation for seven years and has the hearty support of the teachers and the people.

High-school graduation, with sixteen approved units, is required for admission to the four years' course, which leads to the degree of bachelor of arts in education and a license to teach in Cincinnati schools. The first two years are taken up with the study of the subjects required in the College of Arts and the last two years are devoted to specialization in subjects selected by the student and to professional study and practice. This practice work is largely confined to the Senior year and runs parallel with the courses in methods begun in the Junior year. Out of the one hundred and twenty-four credits required for the bachelor of arts degree, the College of Liberal Arts allows twenty-four in education. The tendency, however, is to take the regular bachelor of arts degree first and to devote a fifth year to professional studies and training for the bachelor of arts in education.

These graduates are then placed on a preferred list for appointment without further examination, except on professional work, and at a salary of $150 more a year than that paid other new teachers. Until the supply of these graduates is sufficient, a few persons will still be appointed from the outside, or from a list of those examined in the old way. The time is rapidly approaching, however, when all the vacancies will be filled from this preferred list of graduates in education.

The professors and supervisors continue to look after the newly appointed teacher for some time, and it is only after this further test of her work that she receives permanent appointment in the schools. The Teachers College also co-operates with the superintendent in examining other teachers and in recommending for promotion in the schools. It will be seen, thus, that this plan makes the faculty of the college an authority in relation to all the educational work in the schools.

In the College for Teachers, a similar department, in charge of the professor of secondary education, performs corresponding service for the secondary schools. An interesting plan has been worked out whereby this department is made the center of all the university's influence and service to secondary education. The professor of secondary education, who is the supervisor of the city high schools for the Board of Education,

is also the director of affiliated schools for the university and secretary of its board of admission. This plan concentrates in one office the direction and supervision of all the courses of study and professional work in the secondary schools, not only of the city, but of the accredited list as well. It is evident that this complete and effective organization is only possible where the city and the university are in position to co-operate. Under the unique conditions in Cincinnati, the plan is working successfully, to the great benefit of both the high schools and the university.

In addition to the four years' course, described above, the College for Teachers and the College of Liberal Arts give many courses for the benefit of the teachers in the afternoons and on Saturdays. In order to make them as convenient as possible, external classes in college subjects are held in the public-school and library buildings in different parts of the city. The college also holds grade conferences for the discussion of the subject-matter and methods of teaching in the different grades. Under the rules of the Board of Education, a teacher applying for promotion, or for appointment as principal, must first qualify by getting certain college credits, which may be obtained in this way in our university, or by summer work in other universities of corresponding grade. This encourages the teacher to improve these various opportunities for study and advancement. It is impossible to convey in words all the benefits to our schools and teachers which have come from these efforts, but every principal and superintendent will appreciate the value of this service in preparing better teachers and in stimulating and improving those already in the schools. The appreciation of Cincinnati teachers is best shown by the fact that out of the 1,076 teachers in our public schools in a recent year, 623 had taken some courses in the university. One hundred and fifty-nine were graduates of the university. In one of the intermediate schools, out of a total of 27 teachers, 17 have taken courses in the university and six are graduates. Of the 22 teachers in one of the best equipped grade schools, 18 have taken university courses and two are graduates. Of the 128 teachers in the high schools of Cincinnati, 79 have taken work in this university and 45 are graduates.

The faculty of the College for Teachers also act as a board of experts whenever called upon. They have helped in the preparation of building plans, in the arrangement of laboratories, in laying out courses of study, and in organizing new schools. The dean and faculty of the College of Engineering have rendered assistance also in planning industrial education and working out plans for continuation schools and technical high schools. The university furnished the directors and workers for the Schmidlapp Bureau for the investigation of the condition and preparation of working girls. An interesting development is the bureau for the physical, psychological, and social examination of the children who apply to the superintendent's office for permits to go to work. The child and his environment

are here carefully studied by experts before permission is given; and, when it has been, he is followed for a number of years, for the purpose of studying his development and caring for his every interest. These are only a few of the things that have grown out of this service of the university to the schools.

Thru the Department of Political Science, the university has co-operated with the city government in many ways. Plans for a municipal reference library are now being made. The Department of Social Science and the University Settlement have co-operated with the various philanthropies and charities in the effort to eliminate duplications and to bring the many excellent institutions into harmonious relations. Out of this have already come great improvements in parks and playgrounds and a strong movement to make social centers of the schoolhouses.

The several proprietary medical schools of Cincinnati were united and brought into the university and made into a University Medical College of high grade. One result of this has been the erection of a great new city hospital near the university. The laboratory of the hospital is under the control of the College of Medicine and the medical service is performed by its professors. The health board is also organized in intimate relations with the Medical College and provides practical instruction in disinfection and in the inspection of milk, meat, markets, etc., for the medical students, who work under the direction of the health officers on a co-operative plan similar to that in the College of Engineering.

This co-operative course in the Engineering College of the University of Cincinnati has been so fully described in the press that I need only recall it to your memories. It is sufficient to say that, after a trial of six years, it has been found a successful method of training a superior type of engineer.

Time is lacking to mention other co-operative services of this university. I can only say in conclusion that eight years' experience in Cincinnati has not only convinced us of the thoro practicability of these methods of co-operation in education, but also has taught us that this is the best way we can help to solve the problem of the American city.

DISCUSSION

W. W. Boyd, dean of the College of Education, Ohio State University, Columbus, Ohio.—The excellent paper to which we have just listened bristles with suggestions regarding the opportunity which is offered the municipal university to assist the city. Inasmuch as cities generally have not availed themselves of this form of assistance, it was not thought by the speaker that the question proposed for this discussion was meant to limit it to the municipal university. Indeed, if it were, it might be very proper to consider the burden of maintenance of such assistance in trying to discover the value of co-operation. The experience of Toledo in its effort to found a city university, if it does not now present an educational comedy, may soon develop an educational tragedy. In a letter written a few days ago by a citizen of Toledo, he says:

I beg to draw your attention to the diversion of public funds from more needed public utilities. Our Board of Education, as you well know, is making every effort to give our public-school system the highest degree of efficiency. This can be secured only by large financial resources. We are confronted by a pending danger that the Board of Education must reduce its annual levy in order to make way for a university scheme.

But it was not supposed that the discussion was meant to develop the merits of the municipal university. The very certain testimony given by Dr. Dabney, which might be corroborated in many ways, leaves little room to doubt the efficiency of the University of Cincinnati in aiding the city of Cincinnati, especially thru its public-school system.

But every university has the opportunity to make itself serviceable to the city, and the city in turn in which is located a university can do much to aid that university. To develop in our thoughts the methods of co-operation is one of the objects of this discussion. Dr. Dabney begins his paper with a statement which has become common among students of political science, viz., that the problem of democracy is the government of the city. To the solution of that problem, every university should lend itself. Most of the graduates of our universities will become residents in cities. They will be leaders of thought and action and, therefore, should be informed regarding municipal civic questions and should be inspired to enter into movements for the realization of the highest civic ideals. To that end, our departments of political science need to descend from a pedestal of scholastic attainments in theories of government and teach some methods of reforming present-day conditions. Where a university is located in a city, the city affords to such a department, usually with the willing assistance of its officials, the laboratory opportunities for study and research. The practical problems of city government come within the easy and direct reach of the department. Both instructors and students can make such a study with leisurely deductions from facts discerned as the busy official engaged in the routine of office and enmeshed in the web of ward politics cannot make. This opportunity of study develops in the university student that mental activity and perspicacity which make him powerful for service. Moreover, it develops a clear observation of a practical use for his power. If immediate suggestion for improvement in the city service is not followed, at least the future is brightened by the assurance that a newer and more enlightened service will be rendered by the practically educated young man when he enters upon life's duties. Here is co-operation.

It takes only a casual observer to notice the development in the university departments of sociology and economics due to the use made by these departments of city organizations such as associated charities, police courts, juvenile courts, jails, social workers' clubs and guilds, and due also to the study of tenement districts, methods of housing, hospitals, etc. Such study has enlarged the field of knowledge, modified the methods of teaching, and given a new interest to the Second Great Commandment: this has been the city's contribution to the university. In turn, the university thru these departments has offered suggestions and theories for social betterment, and has furnished in students and teachers many earnest and enthusiastic social workers.

There is probably no one here who is not acquainted with many schemes of co-operation now in practice between our universities and cities. It seems to be especially true that state universities are being linked rapidly to the cities of their states in co-operative movements. The university expert is called for constant consultation. A short time ago one city wanting to improve its water system sent to the state university for chemical and civil engineers in order to survey a river system which was supplying the city. In another city, where a controversy had arisen between a city council and a fuel-gas company regarding the supply of natural gas, experts were sought from the state university to make an investigation of the gas fields, supply, pressure, transference, cost, etc. In still another city, where the pottery industries prevail, there is a close relation maintained with the ceramic departments of the state university. Dr. Dabney lays especial emphasis upon the complete and effective plans of co-operation between the

University of Cincinnati and the public schools of Cincinnati. The splendid results in professional training and efficiency of service upon the teaching corps of Cincinnati cannot be doubted by anyone acquainted with the facts.

So we might multiply instances of co-operation. Yet these are only a beginning suggesting to us how the university is to get away from the old conception of a service for the individual, how it is to use its organization for a direct service to society, and how centers of population are to lend themselves to the university in a service for increasing knowledge and inspiring men and women to a zeal in the solution of one of the modern problems.

THE RELATION OF THE STATE UNIVERSITY TO OTHER PARTS OF THE SYSTEM OF PUBLIC INSTRUCTION

GEORGE F. JAMES, DEAN OF THE COLLEGE OF EDUCATION, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN.

The relation of the state university to other parts of the system of public instruction has been practically worked out in this country with a fair degree of efficiency and without very much friction. The state university has responded to the demands of public opinion in vitalizing the various grades of schools in the system of which it is the head and has sought out and improved opportunities of usefulness. The relation which it should bear to the great series of rural, graded, and high schools within each commonwealth offers still many problems difficult of solution but the purpose of this paper is not to consider these questions in detail, but rather to suggest a kind of administrative machinery under which efforts at frictionless co-operation may most easily prove successful.

In very few states has public education been so organized as to secure centralized authority and responsibility capable of unifying and harmonizing all educational energy of a public type. For many reasons, the greatest need in public education, in the United States today, appears to be for a state board of education which shall have complete direction of elementary and secondary schooling and which shall formulate the policy and determine the relationships between the various institutions which do not come within the field so described. The policy of a separate controlling board of regents or trustees for a state university seems to be justified fully by experience, and no argument whether of economy or unity appears either in theory or in practice to justify the inclusion of the highest educational agency of the state, namely, the state university, in a scheme of undifferentiated control of public education together with the lower schools of various grades and other educational and so-called charitable institutions supported by public taxation. A separate board of supervision and direction for state normal schools has also worked well in practice and may well enough be continued. The mutual relations, however, of these schools to the university and other educational institutions of various types which now exist or may hereafter be established should be determined not merely

in outline by legislation but in continuous administration by more centralized authority.

The plan developed here includes:

a) A state board of education with a small membership appointed, for as long a term as may prove practicable, by the governor of the state, this board to be composed of no *ex officio* members, but of intelligent and public-spirited laymen who will serve without pay and who will devote the time necessary to carry on a policy of education affirmed by public opinion and crystallized by legislation.

b) A state superintendent of public instruction elected by the board of education for a term of not less than six years at an adequate salary, with powers and responsibilities precisely indicated and safeguarded by legislative enactment, which shall aim to secure the highest type of executive ability with a guaranty of general culture and professional training and proof of successful teaching and supervisory experience.

c) A department of public instruction with sufficient assistants, supervisors, and directors to act with the state superintendent as a cabinet and to organize and administer the various kinds of schools of elementary and secondary grade with the special types of instruction now included in public education.

d) An examining and supervisory board whose duty it shall be to license for public-school teaching on the basis of legislative provisions which shall establish a high minimum of general studies and professional training, and to maintain impartially and with the most careful scrutiny the single principle of efficiency as the condition of admission to the work of teaching.

e) Such other agencies for the extension of educational opportunity as the state may decide to affirm under the form of reading-circles, teachers' institutes, summer schools, school libraries, all of these to be systematized and directed as part of the work of the state department of public instruction.

The proposals here made contain absolutely nothing that is novel or that has not in one form or another already been put into practice by various states. In only one instance does it appear that as complete a system as this has been organized in any commonwealth and there is reason to conclude that the men and women most directly concerned with public education can with advantage focus much of their thought and energy on the general establishment of this kind of a plan for centralized administration of educational interests.

DISCUSSION

EDWARD C. ELLIOTT, professor of education, University of Wisconsin, Madison, Wis. —My own analysis of the relation of the state university to the other parts of the system of public instruction will, I fear, be somewhat sketchy and incomplete when compared with the detailed, comprehensive presentation of Dean James; furthermore, the absence of any previous opportunity to familiarize myself with the direction and content of his argument has resulted in a certain amount of repetition in my defining of the fundamental issues involved.

The relation that the modern state university bears to the other parts of the educational system of the state has at least six forms. The several individual forms of this relation may be distinguished as: (1) professional; (2) academic; (3) serviential; (4) scientific; (5) civic; (6) reciprocating. Each may be defined briefly in order.

1. *The professional relation.*—By this is meant the proper professional preparation of competent teachers—especially teachers for public secondary schools—and supervisors

and directors of public-school work. The responsibilities inhering in this relation cannot be evaded or neglected. The public high school, as a potent factor in our educational economy, is today in the balance. It will remain in the balance just so long as the great majority of the teachers in this school possess the prevailing abbreviated and inadequate training. Our present standards of education for secondary-school teachers will have to be raised uncounted degrees before the typical high-school teacher will be fitly qualified for service. While the state universities have offended no more in this respect than other institutions of higher rank, state and non-state, it may, nevertheless, be charged that yearly they place their stamp of approval and their mark of promise of meritorious performance upon so many of their graduates having abilities too commonplace and an equipment for teaching too mediocre, that they cannot avoid the suspicion of having failed to carry out the obligation of their professional relationship to the lower schools. The oft-repeated statement that these teachers are as good as the schools pay for is but a platitudinous apology. The truth is that the state universities need to devote as much energy and time and ability to convincing the people of their commonwealths of the value of the teacher in the public school as they have already devoted to convincing the agricultural population of the worth of pure-bred stock. The former problem is no more difficult than the latter.

2. *The academic relation.*—This is a new name for an old problem; nevertheless, no state university can hope to contribute to the establishment and development of educational standards thruout the school system unless it meets justly and firmly the questions of the proper preparation of those who seek to enter it and to acquire its benefits, whether these benefits be intellectual, moral, or economic. If domination is the conventional term to apply to this relationship of responsibility, then there must inevitably be domination of lower schools by higher schools. Yet, this domination must be characterized by a justice, a skill, and a foresight that measure future benefits to student and to state.

3. *The serviential relation.*—In spite of the idealism, the enthusiasm, the faith, each American community presents complicated educational situations. That effective responses to the situations may be assured there should be, at some point in the educational organization, at least one place to which individuals and communities may freely turn for guidance, advice, and assistance. Whether it be the construction and arrangement of a new school building, the modification and adaptation of the program of study, the selection of books, the form and methods for proper statistical records and fiscal accounts, or the establishment of new forms of educational activity, this direct personal service must be accessible.

Moreover, in the rendering of these many varieties of service the university that has not relinquished its claim upon the confidence and support of the people cannot afford to delay until appeal is made. It must make itself familiar with these situations, local and state. For only as the men of the university know the schools outside of the walls of the university will they be able to render rightful service within the walls of the university.

This relationship does not signify any assumption of duty or any usurpation of authority of the existing constituted governmental agencies. On the other hand, it means an unearned increment of advantage to these agencies.

4. *The scientific relation.*—Every child, every schoolroom, every school system, presents a multitude of educational problems which have not yet been scientifically attacked. These problems demand study and investigation. If the university does not undertake this form of research, it will not be undertaken. It must pioneer today on a scientific frontier where there are but few settlers. The scientific problems of education cannot be solved in the political forum, nor can they be dismissed by frequent oracular utterances of the self-inspired.

5. *The civic relation.*—Public education is our most important public undertaking. At this point, more than at any other, democracy must demonstrate its potency. The largest contribution of our public higher institutions of learning must be thru the increase

of civic leadership. To inspire all those who come within its walls, seeking either the general culture of our civilization or the technique of professional education, with the ideals that underlie the public school, and the fundamentals, political, social, and moral, that must obtain in order that the school may realize its end, constitutes one of the main avenues of the university's influence. In every graduate the university should be able to see a potential public servant of the school.

6. *The reciprocating relation.*—It is assumed that the public-school system purposes to be an organic whole. No one of its organized units is independent of the other organized units. No one of its special institutions can be maintained independently of other special institutions or of the organized units.

The old-time educational ladder is disappearing. New forms of secondary education are appearing. Toward the resulting institutions as well as toward other higher institutions—normal schools and non-state institutions—the university must hold an open door. And the academic price of admission must not be above that which educational comity requires.

To maintain these six relations the university must have means and men. The university is neither the head nor the heart of the educational system; but carrying out a whimsical figure of speech, the university is the soul of the public-school system. As in the world of men, the soul cannot disassociate itself from the body and the living body remain, so the university cannot disassociate itself from the educational body and leave that body vitalized.

HOW TO REACH THE INDIVIDUAL STUDENT IN OUR COLLEGES AND UNIVERSITIES

SAMUEL AVERY, CHANCELLOR OF THE UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

I shall admit at the outset that I have no general panacea for the difficulties I wish to discuss. No one will be more pleased than I if the discussion and the paper to follow throw new light on this vexing problem. In fact, after the meeting this afternoon I hope to revise my thoughts on the subject and to incorporate among them the wisdom of my colleagues. I am outlining the problem for your consideration, rather than proposing new or startling remedies.

The magnitude of the problem.—All of our educators agree that our educational development has forced the problem upon us. The old college, with students and faculty equally poverty stricken, had in it certain elements of the home life and certain elements of the monastic life. For its existence it depended largely upon student tuition and gifts from the religious. It contained two groups, democratic within themselves—the faculty group, with a president whose position was but slightly differentiated from that of the faculty over which he presided, and the student group, in which, to be sure, there were differences in wealth and social status, but where these differences were not sufficiently pronounced to cause very exact lines of demarkation. Everyone in the institution was personally acquainted with everyone else. Matters of discipline were threshed out in faculty meetings. Such university officials as registrars, treasurers, superintendents of grounds and buildings, and so forth, were

practically unknown. Their functions were exercised by chairmen of faculty committees. I speak of this phase of college development from personal experience, not that my own student days are so far back in the hoary past, but because my first college was a frontier school, representing this primitive type, which, once universal, has survived to comparatively recent times. I received my first diploma from a president whose college family—faculty, students, and all—numbered only about a quarter as many names as the present pay-roll of the University of Nebraska. Today, as a general rule, a student must be either very brilliant or very troublesome before the college president becomes personally acquainted with him at all.

Between 1830 and 1890 the population of the United States increased four and one-half times, but the number of college students increased more than ten times. During the last twenty years our population has increased approximately one-half, while the number of college students has practically quadrupled. Today there are over 200,000 students in American institutions of higher learning, as against some 4,000 in 1830. One hundred years ago there was probably not one student to 5,000 of population. Today, in the state of Nebraska, every community of 300 has a student in the state university alone, or in one of the university's secondary schools or extension departments. Probably, all told, there are about as many more who go outside the state or to denominational colleges.

During the last twenty years the attendance at Harvard has practically doubled. Columbia is, roughly speaking, five times as great, Yale, three times, Illinois, eleven times, Minnesota and Wisconsin, six times, California, nine times, Cornell, four times, and Michigan, twice as great in numbers as they were twenty years ago. In other institutions the increase has been no less stupendous. It follows inevitably that this enormous influx of students has changed the general character of the student body. I think I am safe in saying that in the early days practically all college students came from cultured homes, or from homes animated by a burning aspiration for higher things. The students were a selected group—not always selected by the most rational means, but nevertheless vastly different in character, training, antecedents, and ideals from the student bodies of today. In the early days the college might say that some of its alumni were true, and some were false, "yet all were stamped with the image of the king." Of the graduates of today some of them are true, and some are false, but the college die has become so worn that we can scarcely find its impress on any of them.

The cause of the increase.—I do not agree with those who lament the decline of the cultural and the development of the vocational and technical courses. As a matter of fact, the function of the old college was to train men for "the learned professions." The result was that the students were

largely from the professional, the wealthy, and the conservative classes. If the son of an artisan or a farmer went to college, his object was thereby to escape from the sphere in which he was born, to lift himself out of a "lower" into a "higher" class. The college was, in short, a professional school, maintained by and for the professional classes. Now, since the period of expansion has come, the college has among its numbers many who are not imbued with the professional spirit. In every arts college—at least, in those situated in large cities—we find mature students whose life-careers have begun, and who are doing college work simply for the pleasure of the work. In spite of the pessimists, we have some students pursuing culture for culture's own sake; and they are not only with us in larger numbers, but also form a larger percentage of the whole than in the older college.

Another cause of the influx of students has been the development of the technical and vocational courses. When President Lincoln, in the darkest hours of the Civil War, signed the bill providing for the land-grant colleges, he little realized how it was destined to modify our entire educational system. I suspect that the persons who led the movement for the land-grant colleges hardly comprehended what would be the outcome of the cause they were promoting. I sometimes wonder what would have been the result had they provided for strictly trade schools, in the mechanic arts and in agriculture, and had not tried to place these institutions on the same academic footing as the older colleges. But such speculations are idle. The word "college" was written in the land-grant act, and we have interpreted a college to mean an institution with a four-year course, superimposed upon a four-year high-school course. With the exception of a few business and barbers' colleges under private control, almost all the institutions of the country have accepted this definition; hence the invasion of the college world by an industrial army.

Another cause of the increase in the number of college students is the social element. The current periodicals are full of discussion of the social usurpation of our colleges. The unrestrained life of American young people—a life more buoyant, more exuberant, and more uncontrolled than exists anywhere else in the world—finds its social expression in our schools. The favorite ready-made clothing advertisement is a picture of a supposed group of college men. Other events in the world of sport are entirely eclipsed by the annual football games between certain institutions. The annual "proms" of some organizations in certain schools are reported to cost the students one hundred dollars each for the expenses of a single evening. Girls in danger of "a nervous breakdown from overstudy" sometimes dance until three o'clock in the morning. One-fourth of a student's entire yearly expenses may go to help the organization to which he belongs to outshine its rivals. Is it any wonder, then, that in the so-called cultural colleges there is universal complaint of lack of student

seriousness, while, generally speaking, those in charge of the technical schools find their problem much simpler? Nor is it strange that this mighty increase in numbers should have introduced into our colleges new and baffling elements, such as to demand our most earnest thought and challenge our highest abilities.

The effect on college life.—I have made some incidental reference to the effect which this influx must inevitably have. Critics of the college are too apt to emphasize what seems blameworthy, without any very careful consideration of the college problem as a whole. Broadly speaking, the increase in the numbers of those who seek knowledge for its own sake is wholesome. Their point of view is likely to be sane, their view of life serious. In fact, my personal experience leads me to think him the ideal student who blends the desire for culture with the desire for efficiency, who desires financial success in order to benefit his community both as a scholar and as a citizen. Every college has many of this type.

On the other hand, the technical students are frequently those who support themselves, who receive from the college very little but technical instruction, who acquire little college spirit, and whose ideals of life are not much modified by their stay on the campus.

The social element of college life should not be condemned; the condemnation should fall on its excesses. Many an awkward boy or girl has thru its influence become fitted to perform in society a higher work than would otherwise have been possible. It has eliminated crudities, removed rough corners, and made the unsocial student a social being. Nevertheless, the influx of those whom the social element attracts has brought into college life many of the things which we must deplore.

The popular statement that "—— College is a mighty good winter resort for a man if one has the price," does not fairly characterize one of the most honored of American institutions, but it does show the attitude of certain students there. Where even part of its students live in such an atmosphere, we could hardly expect an institution to be free from corrupting influences. Every college president knows, and if he is frank will admit, that there is some truth in the strictures of the late Mr. Crane. Of course, by using Mr. Crane's methods one could condemn any human institution. The fact, however, that the college is becoming a more and more potent factor in American life makes student morals and student estimation of ethical principles of supreme importance. The story widely circulated and commonly believed, tho emphatically denied by some who have looked into the matter, that in the destruction by fire of a fraternity house at one institution the students lost their lives because they were too intoxicated to escape, and the other story of the drunken student who blundered into the wrong apartment and was shot as a burglar, are sufficiently well known to make every college president wonder whether conditions having a tendency to cause such things are not present in his

own institution. One hesitates to make sweeping charges, and prefers to quote, so that the first author may bear the responsibility; hence I quote from Birdseye:

> In many of our larger colleges and universities, and in too many of our smaller ones, a very considerable part of the college home life is rotten—terribly so. Some of the smaller and older colleges, with grand records in the past, have as low a standard in student morals as the larger universities. Some of the worst conditions prevail in minor denominational institutions which are presumed to be ultra-religious and to be the chief places for furnishing clergymen for such denominations. Lest these statements be too sweeping, let me again caution the reader that each institution must be judged by itself, and stand or fall alone, and at the particular period under review.

Whenever we feel sure that student morals in any of our schools are as they should be, let us rejoice; but let us never for a moment relax the vigilance of our watchfulness for wrong tendencies, and our opposition to anything that will lower the moral or ethical tone of our institutions of higher learning.

The ultra-social element in our colleges has meant a marked lowering of standards for certain groups of college young women. In my own college days most of the "co-eds" were more or less of the school-ma'am type. There was some frivolous courtship, I admit, but relatively little social frivolity. No young women of that day would tolerate the semi-flirtatiousness, the near-profanity, the easy-going use of first names on short acquaintance, and the other almost intangible things which make up an atmosphere lower in tone, but common enough nowadays to pass almost unnoticed in certain social sets. The difficulty in combating these and other tendencies is that the young people in each institution feel that they should be allowed to go just a little farther than would be tolerated anywhere else. If the publications of other colleges contain naughty pictures, the local institution certainly is bigoted if it will not "stand for" dirty ones, and anyone attempting to uphold the standard of decency followed in the better Christian, Mohammedan, or Shinto homes is accused of trying to run a university on a Sunday-school basis. Nevertheless, the public makes a mistake in assuming that these things need be tolerated in student life. A college is like a community: it contains the careful and the careless, the thoughtful and the thoughtless, the Puritan and the liberal. The administration may be compared to the government of a city: it may stand for wide-open conditions—in other words, it may tolerate those things which degrade—or it may exert itself to make it easy for the students to do right and difficult for them to do wrong.

The problem of dishonesty has existed ever since human relations began. Naturally it was simpler in the old college, where examinations were to a considerable extent oral, where classes were small, and where personal relations between professors and students were close. I cannot believe that this evil has been growing faster than present conditions

might lead us to expect. The system of handing in written work has been the source of an enormous amount of dishonesty. A written exercise seems so impersonal to the student that he is very much inclined to go thru the motions of preparing it along the line of least resistance. Tho I would be the last person to try to dictate to my colleagues in departmental matters, I often wish every university professor could read Kipling's *Jungle Book*, where the old German forester, speaking of his official reports, protests against having to do so much "paper chewing" when he ought to be about his work. Having spent three semesters in a German university where no written work whatever was required, I cannot but feel that our faculties are somewhat responsible for the growth of "cribbing." But whatever may be the cause, dishonesty is one of our most serious problems, because unless surrounded by an atmosphere of intense honesty, even classical culture may produce such leaders as Abe Ruef.

What is to be done?—We have very generally given up the old idea that college men and women should be allowed to lead their own lives and develop in their own way, faculty supervision stopping with the curriculum. Boys and girls of seventeen, fresh from the high school, are not college men or college women. To be sure, they have reached the age at which, even had they remained at home, close family control would have been relaxed. No one would expect the college to exercise the supervision necessary in the secondary schools, yet in some way the college must see to it that its atmosphere is not poisonous to the better things in young life. Of course, during this period the student resents any pressure or disciplinary authority. And yet students accept certain phases of discipline without complaint. In no school of any standing is there any complaint over the elimination of those who do not make passing grades. In some schools expulsions for cheating meet with student approval. On the other hand, in nearly all schools opposition is encountered in disciplining students for drunkenness, immoral suggestion, or riotous conduct. Even in the endowed institution discipline of any such sort is almost always followed by violent newspaper attacks on the college officials, and even, sometimes, by sensational lawsuits. After all, the ideal supervision is a preventive remedy. Our colleges and universities need more, rather than less of it. Harsher discipline is surgery, to be used only when necessary to save life.

A teacher's professional duties fall into three relatively distinct divisions: first, his duty to his subject; second, his duty to his students; third, his duty to the community. The three overlap, and to divide his time equitably is a serious problem. The greatest scholars are frequently the poorest teachers; occasionally they are leaders in public thought outside their special line of activity. I am inclined to believe, however, that if many narrow specialists could only feel what in religious parlance is called "a passion for souls," their new emotions would benefit not only

their students, but would be to their own advantage as specialists. Even the specialist suffers when he becomes analytical, critical, and cynical rather than constructive and sympathetic. But even at the risk of a little loss in intellectual attainment among college professors, we need a revival of interest in students as human beings. No matter how great his intellectual attainments, the professor who looks upon them merely as units in the glory of his department is more or less of a failure in an undergraduate college. In addition to an active personal interest on the part of the professors, every institution should require certain courses in such subjects as hygiene, public health, public and private ethics. These courses should be taught by broad, liberal, and sympathetic men, inspired by the more charitable view of student life which must precede any real ethical progress in American colleges.

The college authorities must do more than they have heretofore done in properly umpiring—if I may use the term—student activities. College officials must see to the elimination of graft in student organizations; must see to it that favors and promotions are not passed out as matters of social or organization favor; must prevent the existence of societies whose memberships are concealed. In the student state students should control; they must have freedom, but nevertheless in every case a faculty or administrative officer should have authority to see that everything is done honorably, fairly, and on a high ethical plane.

In many institutions there is already a dean of men whose business it is to keep in touch with the students, to know them personally and socially, to sympathize with them, to be their friend and adviser. In our larger universities it would not be out of place to divide the student body into groups, and assign to each group an official with no other duties than to give all possible assistance to the students in his group.

As I said in the beginning, however, I am merely outlining the importance and the magnitude of the task. I have attempted to state only in a very general way some of the things which might be done. I realize, of course, that we shall never have absolutely ideal conditions in student life. But unless we cherish our ideals, we shall never even reach and maintain a standard satisfactory to those who are not idealists. The ideal university has as its standard not only that intellectual efficiency everywhere recognized as desirable; it is an institution without snobbishness or aristocratic tendencies, without idleness, without dishonesty, without vice. It is permeated with an atmosphere of freedom, unselfishness, frankness, and good will, in which faculty and students by their united efforts train the future leaders of thought and action, and work together for the betterment of their country and the world.

HOW OUR COLLEGES AND UNIVERSITIES MAINTAIN PERSONAL RELATIONS WITH THE INDIVIDUAL STUDENTS: A REPORT OF AN INVESTIGATION UNDER THE AUSPICES OF THE DEPARTMENT OF HIGHER EDUCATION OF THE NATIONAL EDUCATION ASSOCIATION

ARTHUR R. MEAD, DE PAUW UNIVERSITY, GREENCASTLE, IND.

INTRODUCTION

The material here presented has been compiled from the returns of a questionnaire. The questions were formulated by the secretary, submitted to several university instructors for criticism, and then mailed to 145 different higher educational institutions. The following is a copy of the questions submitted:

1. If your institution has a definite policy that members of the teaching force keep in close personal contact with the students under their instruction, what administrative machinery is used by the institution to accomplish this purpose?

2. If members of your instructional force have supplementary devices for the same purpose, what are they?

3. If your institution has no definite machinery for this purpose, do the members of the instructional force individually have such devices, and what are they?

4. How long has your institution made use of the administrative machinery mentioned in your first answer?

5. If possible, give an estimate of the efficiency of the devices used by your institution and by the instructors.

General tabulation of returns.—The distribution of the 145 circulars is as follows:

Type of Institution	No. Receiving List of Questions	Returns
Sectarian and endowed.....	46	44
State institutions.....	55	32
Women's colleges.....	14	9
Miscellaneous.....	30	4
Totals.....	145	89

The investigation is not exhaustive, but gives only descriptive material about typical institutions. While it is to be regretted that replies were not received from fifty-six institutions, the returns received are from the most important and largest institutions and are therefore all the more valuable. From the nature of the returns, it was found impracticable to tabulate the results upon the same plan as suggested in the questionnaire.

Method of handling returns.—The returns are tabulated and described upon the basis of the device used. This constitutes the larger part of the report, which is followed by a presentation of a few well-organized plans now in use. Lastly, some general facts are indicated in a brief summary. Thus it is seen that the report does not attempt to deal with the question of

size of faculties, or class enrollment per instructor, altho it is intimately related to it. Descriptive material is given of the following devices: class advisers; faculty advisers not on class basis; special faculty committee; professor in charge of major work as adviser; dean and assistant dean as advisers; systems of reports on individual students to administrative officers; required conferences between instructor and student; preceptorial system; and miscellaneous devices. For purposes of comparison, institutions of 500 and less enrollment are referred to as "small," 500 to 1,500 as "medium," and above 1,500 as "large," basing this classification upon the enrollment reported to the United States Bureau of Education for 1908–9.

CLASS ADVISERS

Twenty-two institutions reported the use of the class adviser system in some form. Seven are "large," twelve "medium," and three "small." Four institutions of the medium group, Ohio University, Michigan Agricultural College, Pennsylvania State College, and Mt. Holyoke, report satisfaction with the arrangement. All others of the three groups either give no estimate of its efficiency or state that it is unsatisfactory. At Ohio University it has been in use eleven years; at Michigan Agricultural and Mt. Holyoke ten years.

The administration varies in almost every institution. At the University of Illinois, the adviser usually limits his work to aid in selection of courses; the other and more personal matters are handled by the dean of men. At Dickinson College, the advisers are known as class deans. At Washington University, Vassar College, Yale, California, Wellesley College, Pennsylvania State, Purdue, Colby, Pennsylvania, and Mt. Holyoke, the system applies only to Freshmen. At De Pauw, Michigan, Montana, and Maine, the system applies to Freshmen and Sophomores. In such cases the upper classmen are cared for by some additional device such as the dean or major professor. At Ohio University, Dickinson College, Michigan Agricultural College, and Miami University, there are advisers for each of the four classes. Again, great variances are reported as to the number of advisers and the number of students that one adviser has under his charge. At Washington University, there is an adviser for each group of seven or eight Freshmen; California has twenty-five advisers for the Freshman class; Wellesley provides an adviser for each group of eight or ten Freshmen. At Michigan Agricultural College, the adviser has charge of all the members of one class in one department, e.g., the Freshmen in engineering. Pennsylvania State provides an adviser for each group of thirty Freshmen. At Montana, the groups are five to ten in number. Smith provides one adviser for each twenty students and Miami has two advisers for the Freshmen and one each for the other classes.

The system of Yale University is quite complete. Each adviser is known as a division officer, and is selected from the instructors of Freshmen.

For Sophomores, there is a special Board of Class Officers that meets for discussion of particular cases. After Freshman year, much supervision is carried out by the dean's office. The entire system "reduces the number of men who get into trouble, but is hardly productive of enthusiasm for college work." The system used at the University of California will be referred to in detail later.

The selection of the adviser is more often made by the administration than by the individual student.

FACULTY ADVISERS NOT ON CLASS BASIS

Twenty-one institutions report the use of this plan. Seven are "large," nine "medium," and five "small." The character and efficiency of this plan will be indicated by groups of institutions, "large," "medium," and "small."

Large.—The University of Nebraska has maintained a general system of faculty advisers for three years. It is helpful, but insufficient, because it is not always administered in the best spirit. At Minnesota, the system has been in vogue for two years but is rendered inadequate by a very large enrollment of students. The College of the City of New York assigns students in groups of twenty to advisers, which plan has been in use for two or three years and is unsatisfactory. At New York University, each student is assigned to a special adviser under whose care he remains until the end of the course. The arrangement "works excellently." At Northwestern University, it has been in use ten years, and in connection with reports of delinquency each semester is fairly effective. At Harvard, small groups of four or less students are under the personal care of a member of the faculty.

Medium.—At Ohio Wesleyan University, there is a system of faculty advisers for fraternities, and, based upon some very pertinent facts, it is reported as being very efficient. At the University of Georgia, each student is provided with an adviser who continues that function during the entire course. It has been in vogue four years, and is used in connection with a well-defined system of records and reports for each delinquent student. Brown University has used the plan ten years. President Faunce writes that it "is a help, but not sufficient to solve the problem." Arkansas reports the use of this means for seven years and that it is reasonably effective. The University of Washington uses this device until the student selects his major, when the professor in charge of major work becomes the adviser. It has been in use five years. "The system has had to be modified and will be changed further in its details, but in general it has been efficient." Amherst reports the use of student advisers for five years with good results. Johns Hopkins provides an adviser for groups of six students, which remains for the entire course. Reports of scholastic work are sent the adviser five times during the year. This plan has been

in use since 1876. "The efficiency varies with that of the adviser. Some advisers render great service to their students." Rensselaer Polytechnic Institute has each group of twenty-five or thirty students under the charge of an adviser during the first two years of the course. The adviser reports all delinquency to the head of the school. It is reported that it works well. The University of Colorado combines this plan with the major professor system. It has worked well, in that school, for two years.

Small.—Macalester College unites this plan with the major professor system. Each adviser is responsible for twenty to twenty-five students. There are six advisers appointed by the Board of Trustees. The system has been recently inaugurated, and no estimate can be given of its efficiency. At Swarthmore, each student has a course adviser. Colby College places all Freshmen under the personal care of the president of the college, while the upper classmen are divided into groups of ten or twelve, each group under the supervision of a faculty member. This combined plan has worked well. The University of North Dakota for four years maintained a system in which each student had an adviser from the time of matriculation, but which was abandoned because the faculty felt that the relation thus established between instructor and student was too artificial. President W. F. Foster, of the recently established Reed College, Portland, Ore., reports that each student will select a counselor "who will remain his friend and guide for his entire college course."

SPECIAL FACULTY COMMITTEE

Fifteen institutions report the use of committees for this purpose. Four are "large," six are "medium," and five are "small." The general character of such committees and the names by which they are known vary considerably. The following list will indicate differences of name:

Delinquent Students' Committee (Nebraska); Committee of Student Work (Minnesota); Freshman Advisory Committee (Cincinnati); Board of Advisers (Oberlin); Committee on Standing of Students and Freshman Advisory Committee (Lehigh); Supervisory Committee (Vanderbilt); Committee on Student Welfare (Ohio); Delinquent Committee (Denison); Committee on Religious and Social Life of Students, (Wooster); Committee on Daily Class Work of Students (Wyoming); Committee on Student Organizations (Vermont); Committee on Student Affairs and Special Aid to Freshmen (Swarthmore); Committee on Student Activities (Florida); Student Committee with Dean as Chairman (Radcliffe).

The functions of these various committees are indicated, in many cases, by their name. In the majority of cases, in each of the three groups of institutions, the function emphasized is that of rendering aid and service to the delinquent student. In some cases, the committee does nothing except upon receipt of report of delinquency of some sort. William Jewell College has recently established four committees—all to care for the delinquent student group. The Freshman Advisory Committee of the University of Cincinnati does nothing but look after the details of registration. Wooster

stands uniquely alone with a committee to look after the religious and social life of students.

The efficiency of the committee has been indicated in a few cases. Wyoming (small) reports that it works well. Denison (medium) says: "Has decidedly reduced the number of scholastic failures." Swarthmore (small) reports the use of committees and course adviser for ten years—most effectively during the last two years—and states that together they are "entirely adequate."

Just why institutions have adopted the custom of using these committees, in most cases, for the delinquent students, is not for this paper to discuss; but it seems possible that an extension of functions could be granted to these same committees that would make them worth more to their institutions, and perhaps in some cases actually transform an inactive committee into one rendering valuable service. For example, why should a Freshman Advisory Committee be limited to rendering service in registration? Again, the type of committee suggested by Wooster ought to have valuable possibilities.

PROFESSOR IN CHARGE OF MAJOR WORK AS ADVISER

Thirteen colleges and universities report the use of this plan in some form. Four of these are "large," seven are "medium," and two are "small." The "large" institutions are Leland Stanford Junior, Minnesota, Washington, and Pennsylvania. At Pennsylvania, near the end of the Freshman year, a student is assigned to a group adviser with whom he remains during the rest of his course. "The Group Adviser is a member of the department in which lies one of his groups or major subjects. The Group Adviser has the additional duty of having planned for him such a course as seems specially suited to him." At Washington, as soon as "the major subject is selected the major professor becomes the student's adviser." "The system has had to be modified—but in general it has been efficient" for five years. The plan is rendered very inefficient at Minnesota by a large and increasing enrollment. Leland Stanford provides that each student on entering register in a major department, in which he must take 40 per cent of his work, and the professor in charge becomes his adviser. The plan was first devised at the University of Indiana, and afterward applied to Leland Stanford by President Jordan in 1891. "Its deficiencies are those of the adviser." When departments are large, several professors may divide the advisory work. A full description of the plan and its workings is given in one of the recent reports of President Jordan. The "medium" group is composed of Grinnell, Barnard, Tufts, Oregon, Colorado, Denison, and the University of Maine. Tufts reports the use of the plan for eighteen years and adds that "too much depends on the personality of the adviser." Two institutions make up the "small" group—the University of Montana and the College of the Pacific.

THE DEAN AS ADVISER: OR THE DEAN AND ASSISTANT DEAN AS ADVISERS

This practice is so universal that it is in use, beyond all doubt, in many more institutions than those reporting it for such purpose. The "large" institutions are three in number, "medium," six, and "small," one that reports its use. At the University of Illinois, the dean of men of the Arts College exercises this function. This official begins to get into close relationship with the student before he matriculates as a Freshman, by correspondence with him during the preceding months. Personal conferences are held with students, who are called to the dean's office for no other purpose than this. The dean, or his assistant, visits students who are ill. The plan works very well, and will be considered in more detail later by the dean of men himself. Chicago reports that with the number of deans they have, they are moderately successful in doing this kind of work. A number of institutions mention the dean of women; of the "large" group only the University of Washington makes mention of such an officer, altho there are deans of women at Minnesota and Chicago, and probably in many other universities.

Dickinson College has used a system of class deans for twenty-one years. This officer is properly a class adviser, tho bearing a different title. This combined with a system of monthly reports of delinquency gives good results. The work of the students of Lehigh University "is periodically and carefully examined by the heads of the various degree-giving departments, who constantly take occasion to encourage, advise, or warn as the occasion may demand." In addition, the university uses a system of monthly reports, a Freshman Advisory Committee, and a Conference Department, the last of which was not described in the report. With a student body of six hundred and a faculty of sixty-eight, and with these administrative devices, the institution is able to "keep close watch over all the students of the University." Grinnell reports that the most efficient work of this sort is done by the dean of men and the dean of women. Adelphi College reports a dean of men and a dean of women who exercise this function. Miami University, one of the "medium" group, has a dean of the Arts College, dean of the Normal College, and dean of women, all of whom exercise this function. At Barnard College, the dean is the adviser thruout the course, but especially during the first two years. The one "small" institution, Florida State College for Women, makes the dean the central factor in the advisory system and provides for close co-operation between dean and instructors for this purpose.

SYSTEMS OF REPORTS ON INDIVIDUAL STUDENTS TO ADMINISTRATIVE OFFICIALS

Some form of reports regarding the character of scholastic work of students is in use in practically all institutions; in most cases it refers only to delinquency. Such reports are sometimes made to the faculty in open

meeting, sometimes to the president when the college is small, and frequently to the dean, special committees, and advisers. It is really a part of practically all administrative devices for this purpose, and not one by itself, but is thought important enough to be given considerable emphasis. Ten institutions report the use of some form of report for this purpose. At Northwestern, such reports are made once during each semester by all instructors, but refer only to delinquent students. At Minnesota, such reports are called for by the registrar about three times during each semester, and refer only to delinquents. Rensselaer Polytechnic Institute has used such a system for several years; Dickinson College for ten years. Ohio Wesleyan reports that a system of delinquency reports has rendered valuable aid. Teachers College, Columbia, has a very simple and very efficient plan of individual reports, a copy of which follows:

Name.....Course.....

This report is intended to inform the professor in charge of the student's major subject, the committee on instruction, and the appointment committee of your impressions of this student's strength or weakness. Details are desired rather than a mere rating of qualities. The following categories are suggested for your consideration. (It is not expected that you will attempt to report under each.) (1) Health, vitality, temperament; (2) Initiative, progress, promise; (3) Sincerity, genuineness; (4) Judgment, poise; (5) Methods of work; (6) Causes of failure; (7) Expression, especially in English; (8) Social qualities—culture, refinement, executive ability.

Date.....Signature.....

Dean Russell writes that the machinery is simple and that it works. The University of Kansas has recently established a complete system of weekly reports dealing with the daily work of all students.

REQUIRED CONFERENCES BETWEEN INSTRUCTORS AND STUDENTS

It is a well-known fact that many instructors voluntarily attempt to provide for such conferences. When classes are large, a definite schedule of conferences is announced. Sometimes administrative machinery indirectly compels such conferences, e.g., a report of delinquency sent by instructor to registrar will cause a notice to be sent to the delinquent student to call on the instructor. The writer of this paper was confronted by 180 new students in one class during the first semester of 1911–12. By arranging a schedule of conferences, and by regular class work, a fair degree of acquaintance was established before the middle of the semester. The following institutions report that such conferences are virtually required: Wyoming (small); Dickinson, Me., William Jewell College, and Vassar (medium); Minnesota (large). At Dickinson, these conferences refer only to delinquents. Many institutions report that instructors are "expected" to hold such conferences. Where classes are large, it would seem an indispensable necessity; and where small, a valuable aid.

THE PRECEPTORIAL SYSTEM

But three institutions report the use of the preceptorial plan. They are Princeton, Bowdoin, and Miami. Two of these are "medium," and the last nearly large enough to be so classed. At Princeton, where this has been in vogue since 1905, there are more than 1,400 students, but the system seems to apply to only certain departments. At Miami, the conscious aim of the device is to render greater service to the student doing a high type of work, rather than to lift the delinquent to the level. As Princeton seems to be sponsor for this scheme, its workings there will be described somewhat in detail.[1] The preceptor is usually an assistant professor, who meets small groups of three to six students at stated intervals for closer co-operation in work. Birdseye calls this "an interesting experiment in endeavoring to reach the individual in the larger university." The following is Birdseye's description of the system:

> The Princeton preceptor is meant to be rather the guide, philosopher, and friend of the student. That is, he is to counsel and work with the latter, rather than act merely as the representative of the faculty. The preceptor is to show the pupil how to study, but not to do his work for him. He aims to increase the student's capacity for work, with the result that the amount actually done is largely increased. Taking a concrete example, we find the faculty of history, economics, and politics, with seven professors, and thirteen preceptors who do duty in the department as a whole, and give aid to 230 students who are taking some or all of the courses of the department. A professor gives two lectures a week and devotes in addition three to six hours a week to meeting his proportion of the class in preceptorial work, in squads of five or six. Outside reading is assigned, requiring from each student not less than two hours for every hour in which the preceptors meet the men in squads, for discussion of the week's reading. The Princeton authorities claim that their preceptorial system has again made it possible to reach the individual, even in a large institution, and it has worked well in at least four particulars: (1) an increase in the number of books taken from the library; (2) a change in the topics of students' conversations; (3) a change in the appearance of the campus at night, showing lights in almost every window, and indicating that men are in their rooms at work; (4) a marked decrease in the number of students who come to college merely for fun or athletics or idling.

The fact that since 1907 there has been an actual decrease in the number of Freshmen who were dropped from college is quite largely attributed to this system. The percentages dropped for these years are as follows: 1907, 17 per cent; 1908, 17 per cent; 1909, 13 per cent; 1910, 8 per cent (estimated).[2] The report from Princeton states that the "influence of certain preceptors is very great." Dr. Hyde, president of Bowdoin, lends his statement that the experience of that college also verifies the utility of the preceptorial plan. Miami has just established this system.

MISCELLANEOUS DEVICES

Maryland Agricultural College has a special committee of faculty and representative students, which has been in existence four years. Rebellion

[1] This is practically the Oxford tutorial system.

[2] C. F. Birdseye, *Individual Training in Our Colleges*, p. 260.

must have been quite common, for they report that it "has practically put an end to all tendency to mutiny." However, it would seem that this plan had in it possibilities for great service, and that it is worthy of trial in other institutions.

In many institutions, there have developed in recent years forms of voluntary co-operation between the administration and student organizations, such as clubs, fraternities, sororities, and non-fraternity clubs. This relationship may assume several forms, but a very common one is a system of reports on scholarship of individuals of each organization. In all institutions, practically all instructors maintain office hours at stated times, so that there is a possibility that students may see and confer with instructors. Social functions given by instructors or participated in by instructors also serve to maintain personal relations between student and instructor. Departmental clubs are of great value for the same purpose, but reach only the small group having a special interest in the studies of the department. The seminar is used in many graduate schools, perhaps most effectively in Clark University. President Hall declares it to be the best device that he knows about, after trying many plans for the same purpose.

INSTITUTIONS HAVING NO SPECIFIC PLAN

Thirteen institutions report that they have no definite plan for this work; and five are now working upon the establishment of such plans. Eight are "small," four are "medium," and one is "large." They vary in size from 134 students at Kansas Wesleyan to 1,861 at the University of Texas. Cincinnati and Texas of the "large" group are considering plans. Idaho and North Carolina of the "medium" group, and Washington and Jefferson of the "small" group are organizing administrative devices to keep in close personal contact with the student.

SYSTEMS ESPECIALLY NOTABLE

Attention should be directed to the plans used in several institutions showing the complete working machinery. Most institutions actually use two or more of the devices described in this report. Attention is called to the complete system used by Lehigh University (684 students in 1909). The various units in the system are:

(1) The heads of the various degree-giving departments. (2) Monthly reports to the dean regarding work of Freshmen and Sophomores. (3) A Committee on Standing of Students gives particular attention to members of all classes over whom it is desirable to keep an extra close watch. (4) A Freshman Advisory Committee, made up of instructors of members of that class, at stated periods considers the work of the Freshmen and confers with men needing advice and assistance. (5) A Conference Department originated for the purpose of furnishing assistance to members of Freshmen and Sophomore classes needing such help. A close relationship between student organizations and administration is found to be of great value. It is possible, also, for instructors in class work to keep in close touch with students, for sections are small.

Another very important system is that used by the University of Illinois (4,783 students in 1909). Since the dean of men of that institution is to share in the discussion, no detailed description of it will here be given.

The preceptorial system in use at Princeton, Bowdoin, and Miami should commend itself for its simplicity and possibilities for real effectiveness. Attention is also called again to the very simple and efficient system of individual reports used at Teachers College, Columbia.

A system in use at Yale and the University of California is one of particular importance to large institutions. That of California is described in the following quotation from the report of the dean of the Lower Division of July 1, 1910:

> A year ago, after two years' experience in the advisers' office, I made the suggestion that the supervision of the work of the first-year students could be much more efficiently carried out if the members of the Board of Advisers were formally appointed by the university administration and granted a slight addition to their regular salaries. Up to that time, the board had numbered forty men chosen by myself, and working voluntarily, on my personal request. The placing of the work on a more business-like basis would sufficiently increase the efficiency of the system to cut down the number of advisers from forty to twenty-five. In selecting the twenty-five advisers the foremost consideration was the personal interest of the men in boys as boys rather than as students. They must possess a real desire to get into human relations with the groups intrusted to them and must have tact and adaptability in dealing with personal as contrasted with academic problems. The advisers having been appointed, a list of them was sent to the 250 or more secondary schools of the state with a request to each principal to talk with the boys of his school who were proposing to enter the university, explaining the plan to them, and assisting them to select an adviser, if they so wished. The principal was asked to report the various selections to me, and to give each boy a letter of introduction to the adviser chosen. In addition, the principals were supplied with blanks on which to forward confidential memoranda as to the boy's general character, interests, taste, etc.

Upon arrival at the university, the second person for the student to find was his adviser, who immediately began his part of the work. The advisers have also given receptions for the members of their groups. "Reports show that fully 60 per cent of the Freshmen have thus been reached in more than a perfunctory fashion." The report of the dean further states that the Board of Advisers must have the assistance of the upper classmen to make the scheme more effective. No more special systems will be described, but attention will be called to

A FEW PRINCIPLES THAT OUGHT NOT BE OVERLOOKED

First, the effectiveness of any system depends more upon the efficiency of the one who handles it than on the system.

Second, only few men have the characteristics which qualify them to be advisers.

Third, efficiency depends upon the size of the enrollment, and upon the enrollment in class sections.

Fourth, any system can be nullified by compelling the adviser to attempt to render that service to a very large group of students.

Fifth, most institutions make quite ample provision to care for the delinquent student;

while but few definitely try to render advice and assistance of a valuable nature to the ordinary and to the exceptional student.

Sixth, there is a very great need for the majority of the higher educational institutions to make definite attempts to reach the individual student, and after having reached him, to maintain a personal relationship of such sort that there will result most effective co-operation.

DISCUSSION

Thomas Arkle Clark, dean of men, University of Illinois, Urbana, Ill.—However good a system may be devised for developing and maintaining personal relations between college officials and individual students, it will fail utterly if it does not have behind it something more than a mere system. Systems and methods may seem admirable on paper, but the personality of the individual who runs the system is everything. Most systems of class advisers have been ineffective. The man who wishes to develop personal relations with students must like students, he must have infinite faith in them, even with slight foundation, and they must trust him absolutely. If he cannot get their confidence he is in no position to advise or influence them personally. He can have no set office hours, tho he must always be in his office when he agrees to do so. The young fellow who has screwed up his courage for a confidential talk will very likely never come again if he finds his adviser out when he first calls. If one wishes to develop personal relations with students one must give oneself to it. The student must be seen when he is in the mood, whether that be before breakfast or at midnight. To the adviser nothing may seem trivial. The student's problem is to him a serious one, whether it has to do with his emotions, or his intellectual development, his social or his moral situation.

The student adviser must in some way have discovered the fountain of eternal youth; he must be able to get the viewpoint of the student, and he must often be able to justify this viewpoint. He will, therefore, need constantly to mingle with students in their sports, and in their social diversions. It will be unfortunate if he has no real love for baseball, or football, or track athletics; it is not essential that he dance, smoke, or develop bad habits, but he must not be shocked or discouraged if his boys sometimes do. He will find a well-developed backbone helpful, for he will at times need to give advice, and to insist that it be taken; with all his patience and sympathy he will be forced often to rid the college of unworthy and incorrigible hangers-on.

The method employed by the University of Illinois is relatively simple. That which has to do with purely educational matters—the choice or the changing of studies, matters pertaining purely to scholarship—is left to the class adviser, or to the assistant dean of the college in which the student is registered. The dean of men (and the dean of women as regards the women students) has to do with matters of conduct, of attendance, with all social or moral questions. Since I am personally responsible for these things I may be pardoned, I hope, the personal reference in this paper. I begin early with the freshman. As soon as he applies for entrance to the University I write him a personal letter offering to give him any specific information he may desire, to help him in whatever way he may suggest, and inviting him to come and see me when he arrives at the University, if only for the purpose of getting acquainted. Hundreds take advantage of these offers. For the last three years I have given a series of six lectures on personal hygiene, which all freshmen are required to take. This fact has been invaluable in bringing me into personal and confidential relations with large numbers of new men. All absences from class exercises are reported daily to my office, and students who seem to be unnecessarily absent are called to the office, interviewed, and advised. When the absences exceed a prescribed limit the student is dropped from the course, and may not continue without the consent of the instructor and a committee of which I am chairman. All student organizations and activities are in charge of a committee of which I am a member.

Reports on the work of all freshmen, and all special students, and on all other students whose work is unsatisfactory, are made by instructors twice the first semester and once the second. These reports come to my office, and a record is made on the attendance card of the student, so that when he is called for lax attendance his scholastic record is also before me. The scholarship records are, however, handled primarily by the class advisers, or by the assistant deans.

I have made every effort to get personally acquainted with as many students as possible. I have called every day ten or a dozen for no purpose but to make their acquaintance. I visit all who are sick. I accept as many invitations as possible to student mass-meetings, smokers, parties, and dances, and I go regularly to the fraternity houses to dinner. Mrs. Clark and I keep open house on Sunday afternoons, and all students are welcome. Sometimes we have something to eat, and often not. Occasionally we especially invite to supper all the members of an organization. I have cultivated all sorts of devices and associations to help me remember individuals, and would find it possible now, I am sure, to tell something about a large majority of the 3,500 individual men registered last year at the University. I am the chairman of our Committee on Discipline, and bring to this committee all matters that seem to demand formal action. All others I settle myself. The eleven years that I have spent in this work have taught me that it demands a number of characteristics—interest in the individual, faith in human nature, a youthful spirit, and no nerves. If one has these qualities he will make his own system, and it will work.

R. B. von Klein Smid, professor of psychology and education, DePauw University, Greencastle, Ind.—The report of Secretary Mead shows, in the great majority of cases where replies have been received by the committee, that whatever machinery is employed by the institution to secure personal contact with the student the end of its operation is to look after scholastic matters only, with little or no regard for the many interests that every normal college man possesses. Surely, no one of us in the work with broad ideals, serious purposes, and scientific understanding of the situation will contend for a moment that the college does its whole duty when it succeeds in holding the students to scholastic standards only.

In the matter of scholastic relationship it must be admitted that there is much yet to be desired. Too often have we as instructors, advisers, or deans taken hold of a case too late to be of the most valuable assistance. It is not enough that the student be urged or forcibly held up to make certain grades; long before the difficulty arises he should have been advised what subjects to incorporate in his course. In view both of a unified course and of his future plans he should be told what to study, how to study, and where to secure most helpful assistance. After all, why is the student in this or that particular classroom? Is it because the subject is traditionally easy? Is it because the instructor is popular? Is it because the Phi Beta Kappa honor is most easily to be obtained thru it? Is it a subject "elected by some others of my set," or is it because its place upon the program "best suits my convenience or pleasure"? None of these reasons is sufficient. And yet the student who is honest in confessing is likely to give any one or more of them. How few of the freshmen know how to study to any real advantage or, in previous training, ever have done any right serious and earnest work. And, too, it stands to reason that in a strange environment the new student should be advised concerning equipment on hand for his assistance, and taught how to use the same to greatest advantage. And yet, I again insist that the student has, and rightly has, numerous other interests that must be recognized by those who have charge of his education.

From the beginning of organized education, it has been conceded that the process is a failure that does not develop the moral nature of the individual; and now with the growth of scientific insight, we have added to this doctrine the belief that the educative process falls far short of its opportunities that does not take into consideration the whole

nature of man and give both opportunity and encouragement as well as care and suggestion for complete development. In fact today we do not stop short of converting this belief into a positive demand.

There is the question of the religious life. I had a right to feel that someone had neglected his duty by not offering to the young man both the chance and the encouragement to consider with him the fellow's deepest interest when, after a brief talk at a religious meeting of the men a short time ago, a fine specimen of manhood from the upper classes slipped his hand up over my shoulder and said:

I wish you'd tell me how to be decent again. You think I'm straight and other faculty men think I'm straight, some of the students believe me morally sound, but I want to say to you that I'm not and for some time haven't been. There are times tho when I have a genuine homesick feeling to be decent again.

It is a sad failure on the part of college authorities, I tell you, when the deepest interests of the inner life of the students are neglected while we strive for intellectual attainment.

There is the matter of the student's social life. It is true of course that many students have received fair training in the conventions of social intercourse and have not lacked in opportunities for social contact before coming to the campus. But of a very considerable number this cannot be said. We may smile at a fellow who asks a simple question so often to be found in the advice columns of the *Fireside Weekly;* and yet the problem of using a fork or a spoon with peas or of walking before or behind the young lady whom he is attending when being shown to a seat at a public gathering is of vital importance to the fellow after all, and I contend that it is the business of the college to give some attention to these matters and to train the students in gentlemanly social courtesies.

Then there are the many outside interests closely connected with student life, among which is the problem of physical training. While some spend too much time on the athletic field and in the gymnasium, many spend far too little time there, to the serious weakening of physical power and vitality. In a recent student interview, it developed that one chap had connected himself with five organized interests outside of the classroom, every one of a musical nature, while the same student had been excused from gymnasium requirements on the ground of a lack of time.

And so in concluding this brief discussion, I beg to suggest that we seek so to organize our colleges as to look after the whole man; and without belittling the splendid object of mental attainment, that we recognize that the adolescent has legitimate interests along the line of a considerable list of instinctive tendencies of splendid possibilities.

Raymond M. Hughes, acting-president of Miami University, Oxford, Ohio.—While I can add very little to the excellent report of the secretary which I had the privilege of reading, I would like to emphasize some points which I think the report makes clear.

First: Any effective personal relation established between faculty members and a large percentage of the students must be closely related to some of the work of the students. To assign a number of students arbitrarily to a man and ask him to become acquainted with them, advise, and guide them, puts him and the students in an unnatural relation; in a relation in which the instructor of rare personality only will serve at all effectively. We all dislike being assigned socially; we dislike to have anyone avowedly try to do us good; all such work for students must be done indirectly to be at all effective.

Where the personal acquaintance of instructor and student has been most effective is where they meet somewhat informally in the discharge of some college duty. The professor meeting very small classes; the preceptor at Princeton meeting his small groups; the individual conference of the English instructor with his students; the dean of men at Oberlin meeting all men who are absent from classes to hear the cause of their absence,

and incidentally getting acquainted with them, hearing their troubles, and advising them —all of these may be made most effective means for establishing helpful personal relations.

Second: No one method, scheme, plan, for bringing about desirable personal acquaintance between faculty and students, can be effective and practical for all the members of any faculty. A college must deal with the individual. In scarcely any other institution do we find individual personality so highly differentiated and recognized as in a college faculty, and yet we are rather prone to include all in a single plan. What is thoroly practical for one man, based on his subject, the methods of his work, the type of his students, etc., is entirely impractical with others. The seminar of President G. Stanley Hall of Clark that so many men remember with satisfaction and pleasure is not practical with most teachers, nor with college Freshmen and Sophomores. The professor of English or history who spends hours each week in personal conference with his students cannot be asked to take part in another scheme for accomplishing what he is already doing.

While some men have such rare personality and such social tact that they easily adapt themselves to carry out effectively any reasonable plan, others are rather non-social, not greatly attractive in personality, and lacking in ability to win a student's confidence on their own initiative. These latter, if thrown in contact with students singly or in small groups in their teaching work, will very probably form pleasant and helpful friendships with students.

In my judgment it should be an important part of the duties of the dean to familiarize himself with the work, methods, temperament, and students of each instructor and devise means to develop the personal relations effectively in each case.

Finally, I believe the most effective scheme would involve two superimposed plans: one, in which the men best adapted to the work, presumably the dean or deans, should advise the students about the selection of their work and the arrangement of their courses. One man cannot do this work most effectively for more than one hundred students. In addition to this there should be a variety of schemes, conferences, seminars, athletic supervision, tutorial work, etc., directed by the dean, for effecting a closer and more friendly relation between each instructor and those few of his students that he can best serve.

I am convinced that every instructor can come in close and helpful relations with a reasonable number of his own students to the mutual satisfaction and pleasure of both parties, if the proper basis for the acquaintance is selected in each case.

I also believe that only a small number of any faculty have the attitude toward the college work that makes them thoroly desirable advisers as to arranging courses. Such an adviser should take an intelligent, broad, and sympathetic view of all courses offered. He should be familiar with the work of the entire college and with the needs of the student. Such a man should be able to advise about one hundred students effectively as to their courses.

With sixty to one hundred students only in the classes of each instructor; with a dean or assistant dean to each one hundred students, and with intelligent suggestions to each instructor from the dean, we could hope for such personal relations between students and instructors as we desire for our own children.

THE REPORT OF THE COMMITTEE ON POLICY OF THE DEPARTMENT OF HIGHER EDUCATION

To the Department of Higher Education of the National Education Association:

At the business meeting of the Department of Higher Education a year ago at San Francisco a committee of three was appointed to consider the time and place of the annual meeting of the department and such modification of policy as seemed advisable.

This committee met for conference during the superintendents' meeting at St. Louis, and instructed the chairman to formulate the thought of the committee in a report.

In order that the report might show more clearly the thought of those interested in the department, the following letter was sent to 135 active members of the National Education Association prominent in college or university administration:

For several years past there has been a feeling among the active members of the Department of Higher Education of the National Education Association that the department is not meeting with the success nor reaching as many people as its merits justify. With able officers and excellent programs the meetings have been poorly attended. Last year, at the San Francisco meeting, President James H. Baker deplored the poor attendance, and urged a consideration of what could be done to make the department contribute more to the work it represents. After some discussion the following committee was appointed to consider (*a*) the time and place of the meeting of the department, and (*b*) such other modifications of policy as seem desirable: G. W. A. Luckey, professor of education, University of Nebraska, Lincoln; Frank Strong, president, University of Kansas, Lawrence; C. A. Duniway, president, University of Wyoming, Laramie.

The committee would appreciate your thought concerning the above points and if you are at the Chicago meeting we should like to have you attend the business session of the department.

Replies were received from nearly all to whom letters were sent. About one-third of those to whom letters were sent had never attended the meetings of the department, were unfamiliar with its work, and could not give suggestions. Another third, deeply interested in the work of the department, were rarely permitted to attend the meetings of the department on account of conflicting interests. The final third are by no means regular in attendance, but they are deeply interested in the success of the department and are more regular in attendance than the average. The replies were all interesting and most of them quite helpful. Their nature can be judged from the following quotations:

"The attendance has been poor because the program was weak. The program has been weak because the attendance was slim. Reorganization, in respect to time and place, seems to me fundamental. The colleges should meet with the superintendents."

"Too many diversions in July. Change to the meeting of superintendents."

"It interferes with the work of summer sessions. Change the time of meeting to that of the superintendents, or to that of the Association of American Universities, or the Association of State Universities."

"I attend annually the Association of State Universities. The distance is too great to attend in addition the meeting of the National Education Association."

"Other meetings, such as the National Association of State Universities, Association of American Universities, the Colleges and Universities of the Middle West, etc., take the place of the National Education Association meeting. Change to one of these meetings."

"The National Education Association is made up of public-school teachers—grade teachers. The Association of American Universities; National Association of State Universities; the American Association of Agricultural Colleges and Experiment Stations interest more college and university people. More interest might be had to meet with the superintendents."

"My whole estimate of the summer session of the National Education Association is low. Little good can be done."

"There are too many meetings, such as Southern Education Association; Southern Conferences for Education; Southern Association of Schools and Colleges; teachers' assemblies, etc."

"Too many organizations absorb the time, energy, and money. Summer school also interferes. Meet with the superintendents."

"The perfunctory reading of papers about any subject that happens along by anyone who happens to be willing to function will not produce very important results."

"The Department of Higher Education should meet with the superintendents."

"I have been prevented from attending the meetings for ten years on account of summer-school work. Too many departments divide the interest. Different institutions should be represented by delegates."

"Change time to the winter meeting. Send postal cards containing program and suggestion of the higher interest involved to the professors of education and to professors whose subject is related to the one on the program."

"Make a live program. Hold meeting when there is least conflict, on first days of the National Education Association. Have colleges send delegates or representatives."

"Hold the meetings in connection with the meeting of superintendents. Probably with the co-operation between the Association of American Agricultural Colleges and Experiment Stations or the Association of State Universities."

"Leave time and place of the meeting as now. I will be at the meeting."

"Have not attended the National Education Association for several years and cannot suggest remedies. Probably the small attendance is due to the number of other associations of colleges and universities."

"It cannot be a success while it meets in the summer, at the time when college men are engaged in the summer-school work. Have it meet with the superintendents."

"Change to the superintendents' meeting. Have a live subject with a study of thirty minutes. Then a few ten-minute papers, followed with five-minute discussions."

"Change to the meeting of superintendents. More will always be in attendance at the latter meeting."

"The time of the year and the distance makes attendance impossible. There are other more vital meetings such as the North-Central Association of Colleges and Secondary Schools; the National Association of State Universities, etc. Change time to mid-winter."

"Change time of National Education Association to late in August or change the higher department to the time of superintendents' meeting. The members are now in summer schools."

"Change the meeting to that of superintendents because of work in summer school and the need of unbroken vacation for travel and rest."

"There are too many meetings. I attend the National Association of State Universities, the Ohio College Association, the Association of College Presidents and Deans, and at least a dozen other organizations of similar nature."

"Give education or pedagogy a proper place and an adequate development in higher education."

"The disposition of the department is to settle problems rather than to discuss them."

"Unite with the many formed societies for the study of college and university administration."

"There is not a permanent membership. The attendance changes almost completely each year. This destroys interest. To meet with the superintendents would be better."

"A more suitable time for the meeting is in February with the superintendents. The gray matter of the brain works better then."

"In summer, college men seek the country, not the city. Have the meeting come during the college year."

"I find at the meetings little or nothing of value. The National Education Association is too large and unwieldy. It is not attractive to men who have real problems to solve and work to do."

"Hold the meeting with the superintendents in February."

"I cannot attend. Summer session is in the way. Meet with the superintendents."

"There is need of a definite program dealing with college issues—a program running thru several years considering large and vital problems. Men tend to become fixated in methods and thought and do not care to change or to know the new. Hence many are not interested in the work of these meetings."

"The general meetings of the National Education Association are decorative rather than informational. Change to the superintendents' meeting."

"Non-state schools are too largely ignored in making up the officers and programs. There is no need of a new society of denominational colleges."

"Make a strong program well distributed both as to subjects and men."

"The National Education Association doesn't arouse my enthusiasm. I am not interested in the squabbles they furnish and the unwholesome atmosphere for the right kind of work."

"It is a bad time of the year for college people. The crowds of the National Education Association are not conducive to comfort or pleasure. Other university societies and superintendents' meeting more attractive."

"Change to the February meeting and reduce the number of meetings."

"Change time to the meeting of superintendents. Put on program professional training of high-school teachers."

"Other meetings of more interest to college men. Association of University Presidents in November or Association of Agricultural Colleges and Experiment Stations deal with live problems."

"Keep politics out. Put educators and not wire-pullers on the program."

"Most college teachers plan definitely for their summer vacation. The meeting breaks into the more important plans; travel in Europe, summer sessions, research work, etc. Have the principal meeting come a few days before or a few days after the superintendents' meeting."

"Too many diverting interests. Association has grown too large."

"Time too important. Expense too great to attend two national meetings per year. It interferes with summer session, summer rest, and foreign study. Change to February meeting."

Summarizing briefly:

Three-fourths or more of those who replied mentioned the February meeting of the Department of Superintendence as being a more suitable time for holding the meeting of the Department of Higher Education.

1. A larger number of college men and women attend the winter meeting. The interests of that meeting are more in common with the interests of higher education. The distance is too great to justify many people in attending two annual meetings.

2. Since the establishment of so many summer sessions it is more difficult for college men who are alive and in demand to drop their work in July than in February.

3. The life of the ordinary college teacher is quite strenuous for at least ten months in the year. When not occupied in summer sessions he needs his short vacation for rest, travel, or study. In July his surplus energy is low and he naturally shrinks from entertaining crowds of grade teachers bent on having a good time.

4. There are too many associations and departments with common purposes and

overlapping interests. The enrichment of these thru combination and internal improvement is desirable.

5. The Department of Higher Education suffers from the want of definite organization and permanent membership. It is too loosely jointed. Any active member of the National Education Association may assist in electing the officers of the Department of Higher Education and in fixing its program. Its membership, if it has any, is not regular. But few of its members have been in attendance at any two consecutive meetings. Hence it has been difficult if not impossible to build up a strong and attractive program, one that has continuity and reaches over several years.

6. Little interest has been taken in the business meeting. There has been no regular membership list to draw from for officers. Hence the officers are not infrequently persons who have not attended the meetings before and know but little of the work and purpose of the department.

7. The tendency in late years has been to multiply associations rather than to enrich those we already have. Note the new organization of the society for the study of college and university administration formed at the St. Louis Meeting of Superintendence.

8. Many would like to see the union of, or at least a closer correlation between, the Department of Higher Education; the National Association of State Universities; the Association of American Universities; the American Association of Agricultural Colleges and Experiment Stations.

Your committee after due consideration desires to present the following recommendations:

1. We recommend that the Department of Higher Education of the National Education Association hereafter hold its annual meetings during the week of, and in connection with, the Department of Superintendence.

2. We recommend that the department be reorganized and strengthened, presenting a declaration of principles and interests, affording opportunity for permanent membership of persons similarly interested.

3. We recommend that a program committee of five be created, of which committee the president and secretary shall constitute members *ex officio:* the other three members to be elected at the annual meetings for a term of three years, so arranged after the first election that the term of one member will expire each year.

4. We recommend that the program committee be instructed: (*a*) to give special opportunity on the program for outline reports of research, investigation, and study of subjects of vital interest to students of higher education; (*b*) to provide for conferences on special topics of academic and professional education and of college administration; (*c*) to encourage five- and ten-minute discussions of work in progress or on live topics connected with the field of higher education.

5. We recommend that a committee of five, appointed by the chair, of which the new president is to be chairman, be constituted to confer with the other national organizations of kindred purpose regarding the advisability of closer union in time and place of meeting, if not in program.

Respectfully submitted,

Committee { G. W. A. Luckey, Lincoln, Nebr.
Frank Strong, Lawrence, Kans.
C. A. Duniway, Laramie, Wyo.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

ST. LOUIS MEETING

OFFICERS

President—W. J. Hawkins, president, State Normal School.....Warrensburg, Mo.
Vice-President—A. J. Matthews, president, Tempe Normal School.....Tempe, Ariz.
Secretary—Miss Martha Buck, Southern Illinois State Normal School.....Carbondale, Ill.

FIRST SESSION—Wednesday Afternoon, February 28, 1912

The opening meeting of the special session of the Normal School Department was held in the Planters Hotel Convention Hall, St. Louis, Mo., on Wednesday, February 28, at 2:30 P.M.

The meeting was called to order by the president, W. J. Hawkins, president of the State Normal School, Warrensburg, Mo.

The first address, "The Attitude of the Normal Schools toward Education," was delivered by W. J. Hawkins, Warrensburg, Mo.

This was followed by a paper on "The Work of the Normal School in the Reorganization of the Elementary-School Curriculum," by Eugene W. Bohannon, president of the State Normal School, Duluth, Minn.

This paper was discussed by C. A. Phillips, head of Department of Education, State Normal School, Warrensburg, Mo.

"The Place of the Normal School in Agricultural Education" was presented by E. E. Balcomb, Department of Agricultural Education, State Normal and Industrial College, Greensboro, N.C.

This paper was discussed by the following: Augustus O. Thomas, president of State Normal School, Kearney, Nebr.; William M. Stewart, dean of the School of Education, University of Utah, Salt Lake City, Utah; Daniel B. Parkinson, president of Southern Illinois Normal University, Carbondale, Ill.; and D. B. Johnson, president of Winthrop Normal and Industrial College, Rock Hill, S.C.

The following resolution made at the meeting of the Department of Superintendence on Wednesday morning, February 28, was offered for indorsement, and so voted:

Whereas, The Page Bill, or Senate Bill Number Three, introduced by Senator Page in the Senate of the United States, seeks to accomplish the good purposes of the Burkett-Pollard and Dolliver-Davis bills and other good purposes not provided for in those bills, and has now been amended to suit the needs of all the states, and

Whereas, It proposes to co-operate with the states in encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools; in preparing teachers for these vocational courses in state colleges of agriculture and the mechanic arts; in maintaining instruction in these vocational subjects in state normal schools; and in maintaining extension departments in state colleges of agriculture and mechanic arts; therefore be it

Resolved, That we indorse the Page Bill, or Senate Bill Number Three, and call upon the members of the United States Senate and House of Representatives to pass it promptly in the best interests of all the people.

John W. Cook, president of Northern Illinois State Normal School, De Kalb, Ill., and Charles Evans, president of Central State Normal School, Edmond, Okla., made

remarks on the connection between the training department in normal schools and the local public schools.

William B. Owen, principal of the Chicago Normal School, Chicago, Ill., offered the following resolution which was carried:

Resolved, That the officers of the Department of Normal Schools consider the advisability of making provision in its program for the consideration of the problems of city normal or training schools.

The meeting then adjourned.

SECOND SESSION—THURSDAY FORENOON, FEBRUARY 29, 1912

The meeting was called to order at 9:30 A.M. in the Planters Hotel Convention Hall. President Hawkins presided.

The first paper, on "Standards of Measuring the Efficiency of Normal-School Students," was presented by Charles McKenny, president of the Michigan State Normal College, Ypsilanti, Mich.

The paper was discussed by the following: W. T. Carrington, president of State Normal School, Springfield, Mo.; J. W. Dinsmore, dean of the Normal School and professor of pedagogy, Berea College, Berea, Ky.; Charles W. Briles, president of East Central State Normal School, Ada, Okla.; Edwin L. Rouse, dean of the State Normal School, Peru, Nebr.; E. L. Hendricks, professor of history, State Normal School, Warrensburg, Mo.; W. M. Stewart, dean of the School of Education, University of Utah, Salt Lake City, Utah; and J. W. Cook, president of Northern Illinois State Normal School, De Kalb, Ill.

The chairman of the committee, Homer H. Seerley, president of Iowa State Teachers College, Cedar Falls, Iowa, read the "Preliminary Report of the Committee of Eleven on a Plan of Normal-School Statistics."

The motion that the committee be continued was then made and carried.

Suggestions for the committee were offered by several members urging that reports asked of the schools contain less minutiae.

D. B. Parkinson, president of State Normal School, Carbondale, Ill., called attention to a recent call from Francis G. Blair, state superintendent of public instruction, Springfield, Ill., for a joint conference of the several boards of trustees and presidents of the state normal schools to discuss some matters of mutual interest, viz., "Some Uniformities," "Co-operation in Legislative Askings," "Selection of Teachers," "Normal-School Extension Work," and "The Sabbatical Year."

The meeting then adjourned.

MARTHA BUCK, *Secretary*

PAPERS AND DISCUSSIONS

THE ATTITUDE OF THE NORMAL SCHOOLS TOWARD EDUCATION

W. J. HAWKINS, PRESIDENT OF THE STATE NORMAL SCHOOL, WARRENSBURG, MO.

Since the organization of the Department of Normal Schools as a part of the National Education Association, it has been the national clearing-house of normal-school thought. How much the department has contributed to the advancement of the standards of normal schools in this country we have no means of showing. But it is certain that without this means of

communication and contact, the progress would have been more difficult and much slower than it has been. The gravest problems and the highest achievements have been brought to this common council.

Not only has the department given itself to the free discussion of vital problems, it has several times gone into investigations and endeavored to determine conditions and to formulate new policies therefrom. These investigations have probably been the most fruitful means of general progress in normal-school work.

Very little in the way of special investigation was undertaken prior to 1890. In 1892 a committee was appointed to report a plan for co-ordinating universities and normal schools in order to secure a university education to normal-school graduates, and a pedagogical training for university graduates intending to teach; and thus supply the profession with teachers who shall have had both a pedagogical and a university training. It required some courage in those days, when public sentiment was favorable to university education and, in the main, ignorant of or antagonistic to normal schools, to undertake a co-ordination of the products of these two types of institutions. The committee made its report in 1894, after a careful tabulation of courses of study in twenty-five leading normal schools and conferring with twenty-three universities. In 1895 a committee of five was appointed to present a report on topics that directly concerned the department. In 1896 the committee presented a preliminary report on the following topics:

1. Control of normal schools
2. Maintenance
3. Variations that exist on account of geographical location
4. Model and practice schools
5. Recognition of diplomas

Other reports were made in 1897 and 1898 and a final report in 1899. The work of this committee was probably the most searching that has been done by the department. It brought out the diversity of theories and practices in normal-school education. It found a provincialism not existing in any other class of schools. It found high standards of efficiency liberally supported and fully indorsed by the constituency; it also found conservatism and lack of standards that were appalling. The report was worth many times the effort and doubtless was a leaven in the meal, tho it by no means leavened the whole lump.

In 1905 a committee was appointed to formulate a policy for the preparation and qualification of teachers for both elementary and secondary schools. The first report of this committee was made in 1907 and the final report in 1908. In this report the standards of requirements of the normal schools were stated in no uncertain terms, some of which are as follows:

1. That the state normal schools make high-school graduation, or the equivalent, a basis for admission to the standard normal school.

2. That the normal schools prepare teachers for the entire public service—elementary and secondary.

3. That the normal schools establish well-organized departments of research work leading to the solution of problems affecting education and life.

4. That while the normal school is not the only agent for the training of teachers, it is the state's chief agent and as such it should set up standards of teaching, determine ideals, and train men and women whose call is to educational leadership.

5. That the curriculum of the normal school should be broad enough in scope to touch all phases of special preparation demanded by the broadening curriculum of the public schools.

In the adoption of the report, Principal Francis J. Chaney, of the State Normal School, Cortland, N.Y., said:

I heartily indorse the report. It formulates an educational policy which the normal schools can approve without apologizing to anybody. I believe that it is a policy that every normal-school instructor on this floor believes in.

I think he spoke the sentiment of a large majority of normal-school people in this country. The report was heard gladly by many, but by some with indifference. Its influence on some schools was immediate, especially on entrance requirements and extension of courses for graduation. As a result, the standards of normal schools thruout the country are now at greater variance than ever before. The national commissioner of education in the report of 1910 says:

Requirements for admission to the public normal schools in the different states vary so widely that close comparisons of courses of study are very difficult.

In the matter of entrance requirements, state normal schools now fall into three groups: those requiring completion of the eight grades of the elementary school, those requiring the completion of the first two years of a high school, and those requiring the completion of a four-year high-school course. With considerable regularity the schools of each group offer two-year and four-year courses. Those of the lowest standard offer to graduates of elementary schools a four-year course that parallels the high-school course; and to those who have completed two years of high-school work, a two-year course. Those requiring two years of high-school work for entrance offer two-year, four-year, and some of them six-year courses. Schools that require for entrance graduation from a four-year high school offer two-year and four-year courses. It seems to me that this wide variation can hardly be justified. Certainly, it cannot be on the ground of standards of preparation required for teachers, as the content of the curricula of elementary and secondary schools varies but slightly in the different states or in different parts of the same state.

Again, in the commissioner's report, Table 105, which is a tabulation of studies in manual arts, domestic economy, agriculture, and general science in the regular courses, it is shown that only about 150 of the 196 public normal schools offer opportunities for specialization in these subjects; and of this 150, 16 offer sewing only. This is a condition difficult to account for

when we consider the interest in vocational training in the schools and the constantly increasing demand for especially prepared teachers for these subjects. It is also difficult on the ground of public support of normal schools, when statistics show that in the last ten years the appropriations thruout the states for maintenance of normal schools have more than doubled and those for buildings and equipment have nearly quadrupled. From this it would seem that the people believe in normal-school education; if so, it must be that the conservatism of normal-school men is the real handicap to uniform provisions for the preparation of teachers for all phases of work required in the public schools.

Referring to the findings read above, from the report to this department by its committee in 1908, I want to make a contention for the recommendation in Section 4 of that report; namely:

> That the normal schools establish well-organized departments of research work leading to the solution of problems affecting education and life.

I believe this recommendation has not been taken seriously by many normal schools. Its meaning was not as apparent to all at that time as it must be now. The framers of the recommendation saw the light in a way not given to all of us to see; or they were prophetic in a prophecy that is being fulfilled with unmistakable certainty.

The attitude of the thinking mind toward education has undergone a remarkable change within the last few years. The scientific method of approach to problems of business and of life is becoming the method of approach to problems in education. A proposition to be accepted must be verified by the facts. President William P. Foster in *Administration of the College Curriculum* says:

> The chief movement in the history of the college curriculum in America is the breakdown of the prescribed program thru the evolution of the elective system.

Then discussing the relation between college studies and success in life, he establishes his conclusions by tabulating facts of groups of students while in college and thru a series of years after they were established in life. His conclusions are based upon facts and not opinions. Dr. Snedden in an article "What of Liberal Education?" in the January *Atlantic Monthly*, says:

> Over a million boys and girls, under no legal compulsion, now pursue the traditional types of liberal learning in public secondary schools in America; and the men and women in the colleges are to be numbered by hundreds of thousands. But much of the work done in these institutions is without clear purpose, and therefore largely futile as regards the finer ends of liberal education.

Doubtless these statements are true; but there is no tabulation of facts to determine what work is done without clear purpose, or why it is largely futile. Dr. Perry in his very recent work, *Outlines of School Administration*, uses numerous tabulations in making comparisons of the organization of school systems in this country, and of our systems with systems in other

countries. For example, in six large cities of this country he shows how many minutes per week thru the eight grades are given to arithmetic, to English, to geography, and so on thru all the subjects of the curriculum. These tabulations are valuable in matters of organization. But what of their value in the solution of the real problem—what have the children to show for the time spent? In one city an average of 219 minutes per week for eight years is devoted to arithmetic; in another city only 141 minutes per week. Education of today is not so much concerned about the time element as it is about results—results that count in life after the graduation day is past. How teachers shall determine education values in the things that are required, is the problem that most concerns teachers, most concerns those who maintain the schools, and most of all, the children and youths who pursue the different studies not from any election or choice of their own.

The solution of this problem by research work, as the recommendation indicates, is not only the legitimate work of the normal schools, but a duty that devolves upon them. It has been claimed that the normal schools are limited in their sphere of action to the preparation of teachers, professionally, for the public schools, and the elementary schools only; that they are no part of a school system; that the elementary school, the secondary school, and the university make the completed system, and that the normal school is simply a blind-alley that starts nowhere and leads nowhere. The falsity of such a view is now well established. Many normal schools are doing the academic work of the college and are doing it well. One of the graduates of the school which I represent, and now a student in Columbia University, said to me only a few weeks ago:

> I have a higher regard for my teachers in the normal school since I came here, for I have had nothing to undo.

The same is the experience of normal-school graduates in general.

Research work can alone solve the problems in education. It is being begun by the schools of education of the universities. These schools of education are grappling with the real problems in education and life that the normal schools have left wholly untouched.

It is my contention that the normal schools are now prepared to enter and should enter this field of work. They have in their faculties men and women who are capable of undertaking such work. The states can devote the public funds to no purpose that more directly concerns the people. Everyone engaged directly or indirectly in the elementary or the secondary schools knows that much of the work is merely "marking time." It affords neither discipline, information, nor knowledge. The schools of today have in the main an intelligent constituency. They know that a large part of the work of the schools unfits rather than fits for life. Only a small percentage of the children can be held in school to complete the elementary course. In our own state only a small fraction over 5 per cent ever enter a

high school, and this percentage is not lower than in most other states. Educators know that there is great waste. The schools do not meet the needs of the child in his relations to the times in which he is to live. The results are deplored and criticized. The people do not know the remedy. Educators are expected to know it but they do not. They are getting anxious to find out. The people are pushing them on to find out.

Some years ago, Dr. Rice made a severe arraignment of the public schools and gave in many cases expositions showing utter lack of value in things they were doing. He could offer no remedy. Neither could we. Every few months there appears in magazine or newspaper an article that is a severe criticism of present conditions. Many of the criticisms are only too true.

The attitude of the teacher toward education is changing. He is no longer a mere theorist. He has passed that stage. He is becoming an investigator. He is no longer disposed to follow traditional ways or accept mere opinions. He wants facts. The entire program of every department for this present meeting indicates in no mistakable terms such an attitude on the part of the teacher. A few universities in this country, thru their schools of education, have brought into use the scientific method of relating the facts of psychology and child study to things that are done in the schoolroom. They are measuring intensity of mental efforts scientifically and comparing results. They are employing scientific research to determine real values of things that have been supposed to have educative merit. Why should not the universities apply their efforts of research in the field of education as well as elsewhere? No other field is of such importance or has such possibilities. Scientific investigation and research have marked the way of progress in every other field. We have before us the recent results in agriculture. Only a few years ago tradition and opinion determined everything in the process of the cultivation of the soil. Now we accept only facts determined by experimentation. Farming is changing from blundering probabilities to scientific certainties. Conditions must become the same in education.

What are the normal schools going to do about it? In both elementary and secondary schools there must be elimination, integration, and correlation. These cannot be done at random or on mere opinion. Facts must be determined. The state normal schools have the burden of this work upon them. The state normal schools are the servants of the people who maintain them. They must meet the people's needs. They must lead rather than follow in the changes demanded in our public-school curriculum. The state normal school is the only school at once in touch with the object and content of education as they effect public-school efficiency. One who has given these problems careful study holds that, to enable the prospective teacher to know the value of a course of study, the state normal school will need to support a department of research work. In this department and

under the direction of a skilled investigator, the facts, laws, and principles of education and pedagogy will be discovered and rediscovered. Material in the character of investigators and instructors could be secured from the educational laboratories of our great universities and thus the normal schools would articulate with these institutions. Material in the shape of mental problems could be secured from the public schools and the research department would connect with the future field of the prospective teacher. Every state normal school maintains a training and model school department which in a way is a pedagogical laboratory and might as well serve, in a degree at least, to demonstrate the scientific attitude and method of procedure in determining values of elementary- and secondary-school problems.

To my mind such an enlargement of the services of the state normal school is not only a possibility but is an obligation. The program for this meeting has been arranged with a hope that this body may see its way to appoint a committee to consider ways and means of entering upon such work. I am aware that it is a work which will require many years, but I believe it should be undertaken. At the meeting of the department last summer, the appointment of a committee was authorized to investigate and determine plans of compiling and presenting statistics that will be accurately authoritative of what state normal schools are undertaking to do; also, of the means and facilities at their command and the results that are being obtained. The committee's preliminary report follows in this program. Other topics of the program, namely: "The Work of the Normal School in the Reorganization of the Elementary-School Curriculum," "Standards of Measuring the Efficiency of Normal-School Students," and "The Place of the Normal School in Agricultural Education," have for their purpose the bringing-out of discussions that will indicate the attitude of the normal schools toward the problems which the people demand shall have a solution, or at least an adjustment to present-day conditions. There can be no question that there is an increasing demand on the part of the public for a critical survey and evaluation of existing methods of child instruction. The lack of mental development evidenced in the lack of information and knowledge on the part of children in elementary and secondary schools is apparent to the mass of the people and they are giving expression to their dissatisfaction with existing conditions. The people are fully acquainted with the progress that has been made within the past decade in every condition of life: material, moral, and spiritual. They know they have a right to expect for their children conditions of mental development fully in keeping with the times in which they live. They believe that scientific principles applied in determining values in educative processes will insure the desired conditions. Their confidence in the educators of today will not be maintained unless this is done. The state normal schools are closest of all schools to the public pulse and to them the public looks for a new order of things.

THE WORK OF THE NORMAL SCHOOL IN THE REORGANIZATION OF THE ELEMENTARY-SCHOOL CURRICULUM

EUGENE W. BOHANNON, PRESIDENT OF THE STATE NORMAL SCHOOL, DULUTH, MINN.

The general inquiry involved in the consideration of this subject naturally resolves itself into several inquiries of a more specific character. These relate especially to the nature and extent of the reorganization contemplated, the factors which will determine and accomplish it, the share that the normal schools should have in this, and the means and methods to be employed by them in the accomplishment of such an object.

A rather careful search of the reports of the proceedings of this department shows that this question is a new one in its deliberations. This and the fact that it has been deemed worthy of special consideration at the present time are either an evidence of neglect or an indication that the normal schools are growing up to larger responsibilities and obligations, and among these the ones suggested by the statement of the present topic. It will be safe to assume that in so far as you have thought about this question it has been with less definite reactions than result from the consideration of normal-school problems in general. This is due, no doubt, to the fact that it relates to a sphere of influence which the normal schools have not yet had time to appreciate clearly. There is a growing conviction among those engaged in the work of these institutions that they should come to a clearer understanding of their duties and opportunities in respect to the curriculum of the elementary school, and that they should assume a greater share of responsibility in that connection. It must be true that most of you have had the experience of observing this conviction take more definite shape both in your own minds and in those of your associates within very recent years.

The responsibility and duty of normal schools in this respect are a necessary result of their growing worth, and of their worthy growth. The steady progress thay have made toward the realization of the purpose for which they have been established is proof of their fitness to render a larger measure of service than has been possible heretofore. They cannot make any substantial progress toward a fuller realization of their peculiar purpose without a coincident development of the capacity and obligation of being serviceable in new ways. The development of the ability properly to prepare teachers for the work of the elementary schools presupposes, and is largely dependent upon, an intelligent grasp of the problems of these schools, from every point of view.

The present attitude of the normal schools is more positive than it has been. They are not, so much as they have been, establishments which take orders to turn out a product according to specifications written elsewhere. Fortunately, both they and the public appreciate more fully

than ever before that it is not possible for either to accomplish its purpose so long as any such conception of the function of the normal school prevails. We have entered on a period in their development which will require them to write some of the specifications for the public. They must know the conditions and make the interpretations upon which the determination of the curriculum should be based.

Such demand for a reorganization of the curriculum as it exists is mainly in behalf of a more liberal recognition of the value of industrial education and vocational training; a better grounding in the fundamentals of hygienic and sanitary living, and a better opportunity to develop a saner social life. As a preliminary to this there is, by implication, a demand for the elimination of more or less useless features of existing curricula. The modifications here suggested should be regarded as favoring the children who will never have any other school experience than may be had in the elementary school, but as none the less desirable for those who expect to have a more extended and varied school life. They will make it necessary to omit, add, and rearrange material, as well as to change the direction of effort, all in harmony with an enlarged and truer conception of both the end to be attained and the means to be employed in achieving it. In brief, they will call for a new co-ordination of factors with a perspective to be determined by a new focus, and those who grasp its full significance will not fail to realize that it has its origin in that conception of the function of the school which regards it as an integral part of life rather than a definite attempt at preparation for it. This is not a distinction without a difference. School experience should be an extension and an enlargement of other experience and, if possible, an improvement upon it. Its existence cannot be justified on any other ground. The best preparation for life is right living and this the school must foster, no matter what idols have to be cast down. The transition from the life of the school, or from life as modified by the school, to life, no matter at what age made, should take place with less friction and a smaller loss of time than is customary. The individual should not have to make so many nor such important readjustments before finding his place in life. Any preparation for life which depends upon serious derangement of it is not a good preparation for living a life. There ought to be nothing cataclysmic about the change from the life of the school to the business of earning a livelihood and of living a life. Neither should there be concessions to the spirit of rampant commercialism. The life and the living are mutually dependent and, therefore, inseparable; but the nature of this relationship is of the utmost importance and it should not be vitiated by sordid considerations. The school, especially the elementary school, should not become, more than it now is, an establishment for the outfitting of wage-earners, any more than it should be made to subserve the interests of other and higher schools. This does not preclude the possibility or probability of their being able to carry on their

work in such a way as to raise the wage-earner to a higher level of efficiency and service and so of increasing his earning capacity. Neither does it mean that those who expect to enter the high school, college, or university will be handicapped. These results, however, should be a consequence, rather than the main object, of the work done; and so they will be when the school and other experience are properly integrated, when the completion of the work of the school is only nominally the commencement of life.

In the past the curriculum has taken shape in response to influences exerted by the colleges and universities, public opinion, the various supervising and administrative authorities, including state superintendents, inspectors, and boards of education, together with county and city superintendents, local boards of education, and the individual teacher. It is not necessary to enter into a general consideration of the evils incident to university domination. We all know how the influence of the university has affected the elementary school. In order to meet university requirements the high schools have laid certain demands upon the elementary schools and we might as well admit that the evil results have not been unmixed with good, tho this has been mainly incidental. The interest of the college and university has been more or less selfish and is responsible for a rather serious perversion of the proper purpose and function of both the elementary and the high school. Theoretically the college and the university are an upgrowth from the elementary school and the high school. Practically the elementary school and the high school have been essentially preparatory schools. The work they have done has been determined too much by a consideration of the interests of the few who have found their way to the university. Therefore it has been inevitable that the lower schools should be diverted from their proper purpose. Happily the college and the university have come to a measurable appreciation of the situation and are making some effort to remedy it, but it is safe to say that there is a limit beyond which they will not go, at least voluntarily. The modifications in practice already made are a result mainly of the rebellion of the lower schools. The primary concern of the colleges and universities has been for the very small percentage of children and youth who have become their students. In order to shape the work of this small number to that end they have been too willing, thus far, to shape the work of all the children to the same end, for the former could not be done very well without the latter.

However, the day of bondage is passing, if not past, and a new dispensation impends. Confusion in views and uncertainty in practice have been inevitable results of the effort to make a readjustment and are still prevalent. It is needed that a new synthesis of the various elements be made and this should be the most complete and rational expression possible of the proper work and purpose of the elementary school. It should be free from subserviency to ulterior motives and alien interests and should reflect the best thought and experience available. At the same time it should

take form with a distinct realization of the fact that the course of study is only a means to an end, and in no sense an end in itself.

If the proposed reorganization is to result in anything more than petty system-making it must be based upon convictions and motives that are above suspicion. It should not furnish the opportunity for satisfying any unworthy ambition and those who are to participate in its accomplishment should at no time lose sight of the fact that the only indispensable conditions for a good school are a good teacher and a willing pupil. The special character and arrangement of the subject-matter are in so far secondary considerations, no matter how important they may be deemed in other relations, and any view of the whole situation that results in an exaggerated notion of the efficacy of the course of study is likely to cause those who have it to overlook the more important consideration that no course of study can be any better, in practice, than the teacher using it. In our thinking about this problem we must always return to the overshadowing truth that the solution for it cannot be considered apart from the solution of the problem of providing good teachers. It would be the merest foolishness to delude ourselves with the hope or belief that we can change this relationship. It must not be assumed, however, that this is equivalent to an admission that the character of the curriculum is a matter of no consequence. On the other hand, a clear and well-defined conception of its proper character is indispensable. The distinction to be noted originates in the fact that the equipment of the teacher is the primary consideration. The course of study must be an expression of her conception of the course to be pursued rather than that she be regarded as an instrument for the administration of the course.

Because it is the special function of the normal schools to prepare teachers of all of the children in the elementary schools they must thoroly understand their needs. It should be an invariable requirement that those who teach in them have that training and experience which combine to make such knowledge a necessary result. It would be a mean and ignoble conception of the function of the normal school that would limit it to the duty of supplying teachers trained to meet a demand which the school had neither the ability to appreciate nor any share in defining and interpreting. Fitness to serve as a teacher in a normal school presupposes such a background of knowledge and experience, and should carry with it the opportunity and duty of being a potent factor in the councils of those who determine the curriculum of the elementary school. Nevertheless, it must be admitted that there are still those who seem to hold that the chief function of normal schools is to manufacture teachers to meet a demand which they have had no share in formulating and cannot sanction. The anomalous position of the normal schools, in respect to their relations to the other parts of the public-school system in the different states, has hindered them very seriously in rendering the best service. In reality they do not

function as a part of the state school system except in a partial sense and in an indirect way.

Of the several sources of influence which have been effective in determining the character of the curriculum of the elementary school the one which is closest to the normal schools is the elementary teacher herself. No matter how limited her authority may be, her power of influence is predominant in so far as the real content of the work is concerned, and the normal school, as the teacher of the teacher, is bound to be the most important factor in determining the character of the work done in the elementary school. The normal schools are, or ought to be, intimately acquainted with the problems of the elementary school. They have a keen appreciation of all its needs and of the means and methods appropriate to their realization. The attainment of the special purpose for which they exist depends primarily on this and it is their paramount duty to conduct their work in such a way as to insure such a result in the training of their students. Whatever is essential to the accomplishment of this end is a proper part of their work, and when they do this as it should be done, they should be accorded a large measure of influence in standardizing the work of the elementary school. Perhaps this is only another way of saying that the most effective means at the disposal of the normal schools in respect to the proposed reorganization are to be found in the quantity and quality of the scholarship of their students. Most of the professionally trained elementary teachers come from the normal schools and a yet larger percentage will come from the same source. Their knowledge, scholarship, and culture will determine the effectiveness of the normal school. So long, and in so far, as the normal schools shall be in any sense content to send out large numbers of students with no greater concern than that they be able to find positions readily, so long, and to that extent, will they be impotent factors in all matters relating to the determination of the elementary-school curriculum.

It does not matter so much as we sometimes think, whether the curriculum provides for this or that as it does that the teacher be a living embodiment of the things which should be included in the curriculum. If they are in the teacher they will be in the school, and if they are not in the teacher they will not be in the school, even tho they are in the course of study. If it were as easy to make reforms in the work as in the courses of study the solution would be easy enough. Unquestionably there is too much leaning on the course of study and not a sufficient amount of insistence upon scholarship, culture, and character in the teacher. To be sure, a clear conception of the nature and extent of the field of endeavor is requisite, but it will be present when there are teachers who have the qualities just mentioned. It makes much difference whether the curriculum is a proper and adequate expression of the reaction to duty as outlined in the thought and experience of the teachers who are to follow it in their work. Naturally,

therefore, the normal schools should be institutions thru which prospective teachers could not pass without achieving a reasonable approximation to this standard, and we should have the courage to admit it. If we are to set ourselves the task of assuming these new and heavier responsibilities we shall have to force the roots of culture farther down and out in the soil we cultivate. For that reason the curriculum of the normal school itself is of the greatest consequence. Its content and structure, and the spirit in which it is administered, should be determined in the light of the consideration that the ultimate object is the development of a teacher who will carry with her, as a part of her equipment, an experience and insight which will save her from slavery to a course of study, whether it be one of her own formulation or one of the ready-made sort.

This is an ambitious ideal but no other should guide us. The grades of the training schools should be, as they generally are, a concrete expression of the normal school's conception of the proper nature of the elementary-school curriculum. The experience of the pupil teachers in them helps to normalize their ideas and in that way the influence of the school extends itself to the elementary school at large. The printed outlines of courses of study in these departments serve the double purpose of guiding those who work in them as well as those who teach in other schools of the same grade. It has been my observation that there is a rather general demand from superintendents, principals, and teachers for these printed outlines and a rather gratifying disposition to accept them as normative. This suggests the desirability of rather frequent revision and points to an obligation on the part of the normal schools. It is an obligation which they ought to assume, if only for the sake of the beneficial reaction on their own special work.

The very general acceptance, by certificating authorities, of the normal school diploma as a standard of qualification lends sanction to the suggestion that they should extend their influence as a standardizing agency. Progress in that direction should be desired and sought only as a means of increasing their efficiency and of extending their usefulness, and mainly by means of the character of the preparation given their students.

What has been said herein refers almost entirely to the realization of the conditions upon which the recognition of our fitness for, and the admission of our right to, a larger measure of influence depends, rather than to specific ways and means of exercising it. These are important, of course, but at the present time they appear to me to be secondary to the former consideration. It may be that more normal schools than I think have already convinced the public of their right to assume a more authoritative position in this respect. Nevertheless I am willing to hazard the assertion that there are many which have not, and will not until they shall have had some experience in using richer and more extended courses of study in their own work, even tho it be admitted that the makeshift character of many

of the existing courses in normal schools is an unwilling concession to a demand which they do not approve. However these courses may be designated or described, they can provide but a thin veneer, a mere brush-coat of professional training, so-called, and those who administer them from year to year cannot well escape their circumscribing influence.

Altho the public schools are generally eager to employ teachers with a normal-school training there is a general disposition to express a certain degree of dissatisfaction with their preparation. On the other hand, the normal schools are generally inclined to be dissatisfied with the standard for criticism. Whatever the truth may be as to the justice of both views, and it will hardly be claimed that either is wholly justifiable or wholly unjustifiable, one thing is clearly evident—there is an imperative need for a better understanding of their mutual interests and for thoro co-operation in effort. It is incumbent upon us to devise more effective ways and means for co-operating with the several agencies which prescribe the work in the elementary school. These vary with the states and are too well known to require mention. They are not generally adequate to the accomplishment of the end proposed but others that shall be will follow as a consequence of the demonstration of our fitness to use them.

The problem of supplying properly trained teachers for the rural school still presses for solution, and while normal schools are more or less helpless in respect to it they are not without responsibility. It is to be hoped that they will be able soon to make more important contributions in that direction. At present the superior attractions offered by positions in city and graded schools lead to the absorption of our graduates by them and make it necessary for us to devote the greater part of our attention to the requirements for such work. If we are to continue the attempt to meet this demand, as we must; if we are to assume the still more difficult obligation of supplying well-prepared teachers for the rural schools, together with that of participating more liberally in the effort to reorganize the curricula of both, then most, if not all, of us face the necessity for a radical extension and diversification of our interests and activities.

THE PLACE OF THE NORMAL SCHOOL IN AGRICULTURAL EDUCATION

E. E. BALCOMB, DEPARTMENT OF AGRICULTURAL EDUCATION, STATE NORMAL AND INDUSTRIAL COLLEGE, GREENSBORO, N.C.

The movement for agricultural education is broader and more comprehensive than the mere adding of a recitation once a day from a textbook telling in a brief way how soil is formed, how plants should be raised, and giving a few pictures of fancy poultry and high-bred stock. The children leave all they have read about these things—this textbook knowledge—in the schoolroom between the pages of the textbook, as they have been

taught to do, and as their fathers did before them. They never for a moment think, as they wend their way homeward, that the dirt they are walking on is soil, and that the farmer is sowing his wheat in soil farmed in the same way they have been reading about in the textbook at school. It never dawns on them that illustrations far more eloquent than those they have been reading about, and seeing pictures of in the textbook, are before them in the pastures they pass on their homeward journey; that the cow, whose milk they drink, has a far more vital connection with stock-raising, and with their own lives, than the printed page and all the pictures they can find in their books. They never dream that the chickens they scatter corn for, night and morning, are living examples of the abstract facts they have been studying about.

Wherever the above is true, the children are missing the real mission of the movement for agricultural education. They are very much like the little boy whom Commissioner Claxton tells about. The doctor visited a school one day when a little boy, in response to the teacher's question as to what the world was, responded very glibly that it was "a great round ball spinning thru space," etc. Commissioner Claxton asked the boy if he had ever seen this great ball that was spinning thru space. The boy replied that he had not. Then Dr. Claxton asked him if he thought he could see it if he went out of doors and looked around. The boy said that he did not know, so Dr. Claxton asked him to go out and see. The boy returned presently and reported that he had looked in every direction but "could not find the slightest trace of the world anywhere."

CHILD EMPHASIZES THE TEXTBOOK

To the child studying agriculture, the most necessary thing, as he considers it, is committing to memory the statements he sees in the textbook. Why should he not so consider it? His class standing, his grade, or his mark depends upon what he can tell and what he can remember of the textbook in agriculture, the same as in arithmetic, grammar, and geography.

DISCOUNTED BY TIME-HONORED STUDIES

If the subject of agriculture is mentioned at all among the older and more time-honored studies of the curriculum, it is in a slighting and apologetic way. Emphasis is laid on studying, not on thinking and observing —especially outside of the schoolhouse. Knowledge must be something that can be measured by the textbooks. It reminds one of the little boy, who, tho usually very studious, one day happened to glance up from his book and saw a bright spot on the wall where a sunbeam was reflected. He noticed that the sunbeam was moving, and he became interested in watching it. In his simple way he began to ask himself why this was so. Presently his teacher spoke rather sharply to him and said, "Johnnie, what are you doing?" The boy, somewhat embarrassed, said, "I was

thinking." The teacher said emphatically, "Quit your thinking and go to studying." It is the studying, and not the thinking which makes the marks, which helps the boy to pass from one grade to another. Agricultural education is more than a collection of uninteresting facts. It is an attitude, it is a feeling, it is a different point of view, a new method of presentation.

NORMAL SCHOOLS RESPONSIBLE

The normal schools are to blame in this matter, or at least, they are partly responsible for this point of view. They grind all the material thru the same mill, and it must reach a certain fineness regardless of the original texture. Or they might be compared to a farmer who should sow all the seed that he has in his granary (provided it has passed thru the fanning mill of the high schools, if it has been blown about sufficiently and survived the hot air blast of examinations), in the same way, in the same kind of soil, regardless of its native property, the kind of seed it is, or the soil to which it is adapted. The grading of the seed as poor, good, excellent, etc., depends mostly upon the marks left by the sieves of Latin, higher mathematics, and other theoretical subjects. In other words, the farther the student is removed from doing anything with his hands or thinking anything connected with his present-day surroundings, the farther from solving the social problems of the day, the better prepared he is to be sown as seed among the elementary schools preparing the children for the citizenship of tomorrow. That is, the more he walks backward, with eyes fixed on the past, the better guide is he for the children who are tobogganing for the future with the speed of an automobile.

Normal teachers, who actually think that to teach in the elementary schools Latin and geometry is far more important than vital touch with the child and its home environment, actually deaden enthusiasm and initiative on the part of the young normal student who is preparing for teaching. The enthusiasm gone, the reverence for the textbook is increased. In the abstract studies, the textbook is absolute. There is no other way to get the knowledge of the dead languages and mathematics and some other subjects than from the textbooks. Any new life, and a vital way of getting at this information are absolutely impossible. It is claimed by such teachers that the study of the ancient languages and higher mathematics develop power, and that this power can then be used for any other subject which the child may wish to pursue, or any calling which he wishes to undertake. Modern psychology has long since proved that this statement has no foundation upon fact.

Which student actually gets the best report card to take home to his parents at the end of the month, or the term? The student who remembers most from the textbooks. Who would be recommended by the normal faculty for a good position as teacher? The girl who during her college course has remembered the most names in science, the most Latin grammar,

and the most of her textbooks in every way. In preference to this, it should be the girl who has the most power to do things, who possesses the most enthusiasm and ability to get hold of children.

Every graduate should be required to make her own graduating gown; she should be able to conduct a public meeting; she should be able to cook and serve a good meal of victuals; she should have some acquaintance with the characters in literature; she should know something of the political problems of the day; she should be able to stand on her feet and tell what she thinks and why she thinks so; she should be able to know a dairy cow when she sees it, and a cabbage head from a pumpkin. She should have some knowledge of the laws governing the development of child life; she should be able to deal with the school child as a living, growing, developing human being. She should have these qualifications no matter where she teaches. I do not mean to exclude the ordinary studies which she will expect to teach. Every normal-school student should have a brief review of these common subjects to give her the teacher's point of view. Most of the strong normal schools are giving these, and I am emphasizing only those things which I feel are neglected.

NORMAL SCHOOLS SHOULD SELECT MATERIAL ADAPTED TO RURAL SCHOOL WORK

Every normal school should have a sharp lookout for teachers who are doing excellent work in the rural schools: those teachers who are not merely doing good teaching, but who are really getting hold of the people and raising the standard of living in the community where they teach. There are a number of agencies by which this may be done.

First, a letter should be sent to the county superintendent (every normal school should be on the most friendly and mutually helpful terms with the county superintendents of its state) asking what teachers in his county are making an exceptional success of rural work. This should be done twice a year, once near the close of the year, and once about the first of December. The county superintendents should be urged to see these teachers and lay the advantages of better preparation before them. The normal school should write to them, saying they had heard good reports of their work, and suggesting that the normal school would be glad to do anything it could to assist them in the matter of better preparation. (If there is a lack of available finances, the normal school should have a fund available for loaning to deserving students who agree to return to the rural schools.) The normal school should make it clear that they will help prepare for rural work. One objection to helping these teachers is that the normal school usually urges them after they have finished to seek a position in some city school, rather than return to the rural districts.

The county superintendents and the normal schools should encourage the rural schools to contract with deserving teachers for their services

after returning from taking advanced work at an educational institution. With such a guaranty as this, the rural school teachers would have no difficulty in borrowing "funds to invest in themselves." The normal school should make it clear that no laurel is too green to form a crown for the head of the teacher who can inspire the lives of a rural community.

The second field from which the normal school should seek to obtain material for suitable teachers to train for rural schools is the teachers' training class in the city high schools, and the rural and township high schools. A state visitor of high schools would be of great service in suggesting suitable candidates from these high schools.

A third source for material is offered by the exhibits of corn, tomato, and potato clubs, especially of schools in domestic science and domestic art. Wherever a good exhibit is displayed, inquiry should be made concerning the teacher who had charge of the class or school making the exhibit. Every normal school should have a large and ever-increasing army of loyal alumni to keep it in touch with the teaching affairs of the state. This would be a most excellent avenue thru which to discover worthy teachers for the rural schools.

NORMAL SCHOOLS DISCOURAGE TEACHERS FROM ACCEPTING POSITIONS IN RURAL SCHOOLS

There is no reason why proper selection and encouragement in the field of teaching should not give us many more excellent teachers of agriculture and rural life in general. Teachers who come from rural schools should take training in normal schools which have an environment that will encourage them and stimulate their ambition for this kind of teaching. One difficulty is that most normal schools have an atmosphere which not only does not encourage teaching in this field, but makes teachers feel that it is a matter of social standing as well as finance to teach in the city schools. It is like a very large state university which I know, where all the students in the agricultural departments are referred to as being in the "cow college." The result is that while many students enter this department, most of them before finishing the four years' course have transferred to some other department.

The work that Miss Jessie Field, as the "Corn Lady," has done for the rural schools cannot be overestimated. The influence of such books as *Jean Mitchell's School*, *The Little School-Mistress*, etc., have already sown the seed, which should elevate the teaching of the rural schools to something more than it has been in the past. All educators should encourage young teachers to read these books.

AGRICULTURAL EDUCATION FOR SCHOOLS

The agricultural education for schools is more than the getting of new facts, more than the adding of a new study to the curriculum. Agriculture as studied in the agricultural colleges has three objects: first, that of dis-

covering new truths and new methods of attack on old problems; second, that of presenting these in such a way that farmers (the adult individuals in the rural communities) will be induced to heed them; it includes, of course, training for the wives and mothers; third, that of spending much time and effort in making the farmer familiar with the facts and methods that are already well established. The chief battle is against ignorance. This battle, the teacher and the normal school should be prepared to help prevent in the next generation. The children they train should be able and anxious to apply all knowledge of common methods of farming as fast as the agricultural college puts its stamp of approval on them.

Agricultural education for schools differs from that of the agricultural college in that it does not attempt to discover new truths, does not try to add to the sum total of human knowledge, but only endeavors to teach the young people the things that have been demonstrated, and how to apply this knowledge. This knowledge is intended for the children, the immature, and not for the adults. Agricultural education is preventive medicine, while agricultural college work is curative. If agricultural education can be properly taught in all public schools, there will be a dearth in the crop of ignorant farmers. The agricultural colleges can then devote their energies to discovering new truths, putting the frontier of knowledge farther into the vast wilderness of the unknown, well knowing that they will have an army of scientific farmers behind them eager to apply each new discovery and hold every foot of advance ground the colleges have been able to take.

But how can the students of the normal schools be prepared to do this, unless they have some means of getting this knowledge at first hand? This calls for equipment, and fearless, well-prepared teachers in the normal schools. A few are doing this, but behold the lack of equipment and the infantile efforts of the vast majority of the normal schools. They have four brick walls, the common desks, children saturated with the old ideas of education, a textbook written by a college professor who never taught a day in the rural schools, and a teacher who does not know a Duroc from a Plymouth Rock. In striking contrast to this is the equipment and work of such normal schools as the Kirksville Missouri Normal.

But agricultural education as it should be presented by the normal schools, and as it is taught by the best teachers, is a point of view, a method of attack, an attitude toward life. It means that all studies should be taught in a different manner. It should enable the children to live a fuller, richer, nobler life. It should show them that mastering problems of raising crops, baking bread, and sewing garments is just as truly educational as the solving of a problem in algebra, or learning a conjugation in grammar. In addition to having an equal educational and cultural value, it also has a body of facts that possesses a utilitarian value, which will enable the children of the rural communities to live a life on a higher

materialistic plane. They will as a result of this knowledge get better returns from the soil, have more time for culture and self-improvement, will be better prepared to compete with the other classes, and get a "square deal."

These points I would emphasize:

FIRST: SELECTION

A portion of the students of a state normal school that is preparing teachers of agriculture should be selected from teachers who have a natural liking and aptitude for rural life. The matter of book-learning must not be allowed to overshadow their natural genius for reaching the "farm-folks" on their "native heath." Among birds those of the most gaudy plumage are not always the sweetest singers; the hen of the brightest feathers does not always lay the most eggs. The city student with the most gaudy apparel seldom inspires a rural school, and thru it, a farm community.

SECOND: APTITUDE

Whatever material the normal school has for making rural teachers, it should not proceed in the time-honored way, which President Kirk points out when he says:

> It is quite clear that heretofore the school tended to draw the sympathy of the children away from their homes and to awaken the ambition of the country boy for village life, of the village boy for city life, and of the city boy for the professions and the more leisurely ways of life.

But they should wake up to the other fact which Dr. Kirk points out:

> We see the traditional idea of scholarship in science for the sake of science is untenable. The teaching of dead languages and the deeds of dead monarchs for the sake of culture belongs to the past ages. Science, language, history, and literature that do not affect the minds and habits of children in youth, so as to send them back into their homes with increased disposition for service and enlarged resources for rendering service, are no longer defensible. Moreover, it is now quite clear, and generally conceded that the studies of immediate value in human service are also as good as any other studies for mental discipline and for culture.

THIRD: REORGANIZATION AND EQUIPMENT

Every normal school which essays to teach agriculture should follow the reorganization which is taking place in our most advanced institutions. They should adopt President Kirk's motto when he says:

> It is proposed to curtail in this normal school the old courses in botany for botany's sake, in chemistry for chemistry's sake, in physiology for physiology's sake, and in zoölogy for zoölogy's sake. Botany for practical purposes becomes a division of farm and garden crops. Chemistry takes practical form in a study of commercial products, permanent soil fertility, and food values. Biology turns itself into a concrete study of practical bacteriology. It reaches all the way from the yeast in the bread to the disease-breeding germ in the well-water and the food. It is thought that a half-dozen departments can be combined under the one enlarged utilitarian department of "Farm and

Household Economics." Ours is a farming community, pre-eminently so. Thru trips to the garden and the school farm and experiments and observations participated in, our students are securing knowledge and experience and working skill in some new things that are worth while. We will furnish our own hot luncheon on stormy days and other days and learn by our own experiences how to connect our own indoor laboratories with the larger laboratories, i.e., the farm, the garden, the pasture, the poultry yard, the dairy, the orchard, and the grain field.

To my mind the place of the normal school in agricultural education is best exemplified by the work being done by such educational leaders as John Kirk, Dr. David Felmley, and a few others. They have some of the great normal schools of the United States, and have good farms of real soil where future teachers do real work under real farm conditions. They are learning in a natural way the lessons that every successful teacher of agriculture must learn.

FOURTH: DEVOTE LESS TIME TO DEAD LANGUAGES AND MORE TO PREPARATION FOR PRACTICAL LIVING

It is a sad commentary on our normal schools that our girls who are preparing to teach domestic science and domestic art are too busy learning the dead languages and the deader deeds of dead monarchs to take a practical hand in preparing their own food, and their own wearing-apparel.

FIFTH: NORMAL SCHOOLS SHOULD GIVE TRAINING FOR LEADERSHIP IN RURAL AFFAIRS

In order that the teacher may become more fully acquainted with the needs and members of rural life, she should meet them at their gatherings and there learn how to become a leader in making their lives happier, more enjoyable, and that of the children more serviceable in their homes. In this work normal schools should take the lead and give their pupils an opportunity to get this training. At the Kirksville Normal School they hold such meetings and have stock-judging, corn-judging, poultry-judging, etc., so that the students may be prepared as leaders in these subjects. Some may think that this normal school is going too far in this direction. To all such, President Kirk makes answer for all of us by this question:

> What is this normal school for? Do you have any idea that your law requiring agricultural instruction in the public schools means anything, or is it mere verbiage?

SIXTH: MUST HAVE RURAL PRACTICE SCHOOL

Every state normal school that attempts to prepare teachers of agriculture must have a rural practice school. The proper preparation of teachers in agriculture without first-hand experience in a rural school is impossible. The problem of the rural school is an unsolved one. I know of no one who is making a more earnest and intelligent effort at its solution than President D. B. Johnson, of the Winthrop Normal and Industrial College, at Rock Hill, South Carolina. As he told me one day, they have

wiped the slate clean and are building a course of study without any reference to tradition. They take the children, the soil, and the natural rural surroundings, and with these build a course for the best interests of the future citizens. The course they work out will be a real contribution to the solution of this much-discussed problem. Every normal school is vitally interested in and should give its students an opportunity to share in the solution of this problem.

An important addition to the country schoolhouse was made when its attic was discovered. This discovery alone should entitle Mr. Kirk's name to be handed down to posterity as a benefactor to the rural communities of the world.

In the training of teachers of agriculture at a state normal school, I would emphasize these points:

First: Candidates should be selected who have a natural liking and aptitude for rural life.

Second: The attitude of mind which the normal students should be taught to impart to their future pupils is that of contentment with rural life, rather than a desire for urban life. Moreover, they must be brought to realize that the studies of immediate value in human service are as good as any other studies for mental discipline and for culture.

Third: In teaching the sciences entering into a study of agriculture, the normal school should not give the subject for its own sake, but for the sake of its bearing on the course. Thus, for practical purposes botany becomes a division of farm and garden crops, and biology turns itself into a concrete study of practical bacteriology.

Fourth: Less time should be devoted to the dead languages and more to preparation for practical living.

Fifth: Training should be given for leadership in rural affairs.

Sixth: A rural practice school is necessary.

Seventh: The entrance requirements should be so adjusted that those with rural tastes and training may have an opportunity to pass equal to that of the city-bred girl.

SEVENTH: ALLOWING CITY-BRED GIRLS TO CROWD OUT THOSE WITH RURAL TASTES AND TRAINING

The authorities who control our public normal schools and limit their attendance to those only who are prepared with a mass of dead material, thereby excluding ambitious young people who are otherwise qualified to develop into excellent teachers—the more especially when they exclude those who have demonstrated by actual work that they can enthuse a rural community—are guilty of a worse monopoly than that of the Standard Oil Company, or the Tobacco Trust. These corporations seek to control only the so-called private capital they have acquired, while the normal school is founded and supported directly by the people. These monopolies can add a tenth of a cent to the cost of a gallon of oil, or make it the hundredth part of a cent more expensive to fill one's mouth with tobacco, but there are other means of making a light, and one might fill his mouth with something besides tobacco, so that these monopolies are not prohibitive. But the authority who turns away hundreds of ambitious young

people who are praying for the opportunity to prepare for service in the rural schools must answer a serious charge—the more serious since it refuses them simply because they do not have the technical preparation, and gives their places to those city students who have learned to read glibly a few incorrect sentences of such poor Latin that Caesar himself could not understand it. This artificial limitation has not only deprived these young people of their rightful inheritance, but, what is more serious and far-reaching, has sent these city-bred girls to teach a year or two in the country until they could get their political appointment in the city schools; while in the country, they either did not reach their pupils at all, or they filled them with longings for the city and its gilded civilization. I should like to ask these authorities a simple question: Are you running a private monopoly at public expense, a monopoly in which you have never invested a cent and from which you draw a few thousand a year?

DISCUSSION

W. M. Stewart, dean of the School of Education, University of Utah, Salt Lake City, Utah.—The point of view of social efficiency as the end of education has brought about a reconstruction of the school curriculum. Disciplinary subjects are replaced by the practical. Industrial education is rapidly pushing its way into the curriculum. The doctrine of Herbert Spencer, "things of most worth," is the keynote to the selection of educational material. Traditional education is giving way to an education based upon present industrial and social needs. Ideas are being measured and weighed in the balance of their efficiency to meet the real needs and situations of life as determined by the ideals of society as now constructed. Even a fact to be taught in history is selected from the point of view of its value in helping the learner to understand the various social institutions which make up our present complex life. The function of the school is determined by the needs of society in the process of its evolutionary adjustment. What society and the individual need that can be best done in the school must be done there, no matter what may be the traditions of the past. The teacher must be a sociologist looking out upon the complex life of society, and measuring the various forces operating in civilization with a view of determining the true relationship of the school to the other educational agencies in civilization. This point of view has led to the construction of the school as a life-laboratory thru which the evolutionary forces of civilization are economically adjusted to the embryonic citizen. In response to this ideal, the school today, as never before, is studying its own particular social setting with the view of its own individual adjustment; so the school for the first time in history is assuming a really scientific attitude.

The problem under discussion is to find the place of agriculture in the new scheme of education and especially with respect to the professional training of the teacher.

If agriculture has an important place in the school curriculum, it follows without further argument that it has a similar importance in the curriculum of the normal school or teachers' college.

Using agriculture in its broadest sense as embracing, especially in the elementary curriculum, nature-study, I am ready to make the assertion that, with its practical activities, it is fundamental and hence extremely rich in educational resource. Our civilization has grown out of the soil, which has furnished us the fundamentals—food, clothing, shelter, and the most varied industrial activities. Even the formal subjects are so connected with agriculture that it furnishes the best possible motive for their acquisition. On the social side it is equally rich. The home and family first found

stability in agricultural occupation and no doubt, even today, the most stable home is in the agricultural community. Even such cultural subjects as literature, music, art, etc., have their setting in country life and agricultural activity.

The sociological expert tells us that the present-day menace to our civilization, which seriously impedes our progress and perhaps threatens our downfall, is the instability of the family. I am ready to make the assertion that no subject can do more for the stability of the home than agriculture in the schools. I do not mean the rural schools alone, but also those of the city. I regard agricultural training as fundamental in the common schools and needed by every child. Then, if my contention is correct, and I challenge proof of the contrary, it is the special and necessary function of the school that is training teachers to teach this subject, in some of its phases, to every prospective teacher.

I am ready to concede that there are difficulties in the way, which may make it, for the present, impracticable to teach agriculture in some normal schools and teachers' colleges, and that probably the agricultural colleges will need temporarily to train teachers of agriculture. This, however, will be necessary only in the training of high-school teachers of agriculture, domestic science, and domestic art. But ultimately and ideally, the agricultural teachers as well as all others must be trained in a professional school for teachers. It was once held by many, and especially by high-school and university people, that to know a subject was to be able to teach it; but this idea is now only a tradition. The constantly increasing complexity of education, the social function of the school, and its relation to the complex problems of our civilization, make the professional training of the teacher imperative; no amateur can be trusted to do so important and difficult a work.

The suggestion that agricultural colleges must, for economic reasons, train the special teachers in agriculture can apply only as a brief expedient. Of course a university which has both a teachers' college and a college of agriculture has a great economic advantage over the institution which is not so fortunately situated; but no school for the training of elementary teachers can afford to leave agriculture out of its curriculum. In the case of preparing high-school teachers of agriculture, the situation is somewhat different, as economic conditions always play an important part in the work of the normal school.

If agricultural colleges were to undertake the work of training special teachers in agriculture, it would mean, to do it right, a duplication of the inevitable work of the normal school; even then it could not be so well done as in a teachers' college, for the reason that a teacher thus trained would lack the organic, pedagogical unity so essential in the working-out of a system of education which demands such organic and co-operative work. For a person to be turned out simply as a special teacher in agriculture would doom to utter failure the promotion of agricultural education in the public schools. I take it also that the state agricultural college would not desire to be burdened with such a task except temporarily; for, when this scheme of agricultural teaching has been placed in all the public schools, the agricultural colleges will be swamped by the enormous legitimate demand which will be made upon them from the purely agricultural interests of the country.

The dean of the School of Agriculture in the University of Missouri says:

> In reference to teaching agriculture in the normal schools, it has always seemed to me that there exists today a splendid opportunity which is wide open to the normal schools of Missouri for training teachers of agriculture for primary and secondary schools.
>
> The resolution to teach agriculture is not sufficient. A determination to appoint professors of agriculture in normal schools is a short step in the right direction. The whole problem of the subject-matter to be taught, methods of teaching, and correlation with other subjects is a pedagogical problem from start to finish.

It may readily be shown that it will be vastly more economical to place in the teachers' college the agricultural subjects necessary for the training of teachers than to duplicate the normal schools in agricultural colleges.

The head of the Department of Agriculture of the Missouri State Normal School at Kirksville gives the following statement of the cost of the teaching of agriculture:

Farm investment of $25,000 at 6 per cent	$1,500.00
Live stock and machinery $3,200 at 6 per cent	192.00
Agriculture supplies for laboratory	250.00
Four boys to run farm, $10 per month	480.00
One professor of agriculture	2,000.00
	$4,422.00
Farm's annual income	500.00
Total cost of school	$3,922.00

If I group my students as one term students I would have as my year's attendance 700 students for 60 days.

Therefore 700 students 60 days expense	$3,922.00	
1 student 60 days expense	5.60	
1 student 1 day expense		9.3 cents

Having the farm and department of agriculture for the general culture of the schools,

For each school day for all students	$16.35	
Or per student per school day		2.7 cents

NOTES ON THE SCHOOL GARDEN AND FARM

Teaching can be made more efficient only by teaching in terms of the child's life and interests. We are coming to realize that education should grow out of the lives of the people and back into their lives. Practical nature-study aims to place the child in a sympathetic relation with his environment and give him a broader basis of knowledge whereby he may interpret all his actions. Nature-study should create a sympathy for the industrial activities of the country. The tendency today seems to be to get away from the occupations of our forefathers. Especially is this true in Utah, where the strength and sinew of our people, in the past, has lain in the development of natural resources. We are anxious that our children develop these traits of character which come from learning early to perform some useful activity. We believe in a right balance between physical and mental work. Gymnasium work, while it possesses many advantages, lacks the incentive that work upon the school farm or about the home can give. In the spring of the year, boys frequently ask to be excused from the gymnasium work that they may spend their time in the garden. If a class is at work in the garden during the period before recess, few of the children will leave the garden to join the other pupils in their recess sports. A further evidence of the interest shown is seen during the summer months, when many children spend no small amount of time with the instructor looking after the general garden.

MOTIVES

We try to bring forward as many motives as possible to induce children to take an interest in their garden—winning the approval of the instructor, taking responsibility, and lastly the economic motive. While the economic motive is not the highest, it makes the strongest appeal to the children and should be utilized until a higher one can be inculcated. We are not, however, afraid to introduce a child to the meaning of making a dollar and how to spend it. Many a child has gratified a long-felt wish thru the money he has made by raising chickens or selling garden products. Whenever it is necessary to hire help about the school farm, children are employed. More and better work is done by them than can be obtained from older help. The personal interest plays an important part.

OPPORTUNITIES FOR BROAD INSTRUCTION

No school is better fitted to give instruction in all phases of agriculture and nature-study than ours. We have seven and a half acres that actually belong to the normal school, besides a large campus which can be used for studying landscape gardening,

horticulture, methods of irrigation, entomology, care of domestic animals. We have an orchard of 280 fruit trees, consisting of apples, peaches, pears, quinces, cherries, plums, English walnuts, mulberries, etc.; a stock of nursery trees from which 40 were transplanted last spring; grape vines, rhubarb, asparagus, dewberries, blackberries, red and black raspberries, currants, gooseberries, and half an acre of strawberries. The school farm is located only a few rods from the school building, where it is possible to take a grade out at any time to illustrate work done in the schoolroom.

PLAN OF THE GARDEN

The first six grades have gardens of their own. The seventh and eighth grades devote themselves to experimental work and in assisting in the larger problems of the orchard, cereals, grasses, methods of irrigation, dry farming, etc. The different grade gardens include a variety of garden crops sufficiently large to cover the practice of the ordinary home vegetable garden. These varieties are arranged in an ascending sequence of difficulty by assigning those requiring least care to the lower grades. While the lower grades have no responsibility in looking after the upper-grade gardens, they have the opportunity of observing all the work and frequently take part in their cultivation.

The seventh-grade children this past fall pruned 280 fruit trees. They were taken out in groups of five at first until the instructor was sure that each boy thoroly understood how to prune a tree. Later the whole grade was put at work. The pride shown in doing excellent work was most gratifying. During the time the trees were being pruned, the children were carefully studying a United States bulletin on *Pruning*. These facts were discussed by the instructor and pupils. Later many of the children turned their knowledge to a practical value by pruning the trees at home.

IRRIGATION

As early as May 1, it is necessary to irrigate the garden. Both boys and girls above the fourth grade are taught how to irrigate their gardens. The boys in the upper grades take charge of the orchard and field crops. The value of irrigation and the best methods of irrigating different crops are discussed. Even the smaller children soon learn that different crops require different amounts of water.

DRY FARMING METHODS

Instruction along these lines commences with the first grade, when the children are taught to press the soil about the seeds as they are planted but to leave the soil on top loose and dry. After each shower the soil between the rows is raked or cultivated. In grain-growing, the ground is raked frequently during the early stages of the plant. The garden is plowed in the fall to conserve moisture. This past fall two boys from the eighth grade assisted in this work.

HOME GARDENS

The question of ownership, which forms such an important factor in the school garden, is solved thru the home garden. It is not an easy task to inculcate a feeling of personal responsibility in a garden in which many children have an interest. We have found that when a child has a garden at home he is interested in the school garden for the purpose of finding out facts that he can use at home. A child likes to do his particular work in the school garden a little better than some other child. This motive is appealed to. Last year 320 children under the direction of the instructor planted home gardens. The school supplied the seeds, and when other seeds not given by the school were desired, special arrangement was made with one of the local seed houses to supply them at a reduction in price. Normal students who had had special instruction along the lines of school gardens assisted the director of nature-study in supervising these gardens. These students made two visits and reported what each child was doing. Special care was taken that their parents were seen and our purpose very carefully

explained. A spirit of hearty co-operation was established. Several of the business houses offered prizes as large as $25 this past year.

REPORTS

After receiving seeds each child was required to report when and how he planted his garden, and to draw a careful plan of it. Two weeks later another report was called for. Three reports were made in the spring and one in the fall, each report calling for new data. These reports kept the instructor informed and encouraged the children. The home garden is the most vital part of our work. It interests the parents, gives the child work at home, satisfies an economic feeling, and lastly brings the school into the home.

PRODUCTS OF THE SCHOOL GARDEN

Frequent sales by the children, soliciting orders from people near the schools, and even selling to local dealers, dispose of all produce. Last year after each grade had had its sales, $74 was turned over to the university. Expenses had been deducted and did not include fruit from the orchard which was frozen by a late frost.

STATE FAIR

Last fall the Department of Nature-Study and Agriculture made an exhibit at the state fair which won the commendation of the state and city papers as well as educators. It consisted of grains, grasses, fiber plants, potatoes, fruits, squash, small vegetables, chickens, pigeons, and samples of laboratory work, such as drawings, mounted specimens, collections, and lastly an actual demonstration of class work. Classes from the different grades were conducted from 10:00 to 12:00 A.M. and from 2:00 to 4:00 P.M. each day. Teachers from all parts of the state visited the exhibit and took home suggestions which can be worked out in their own schools. Next year we expect a building in which every phase of our work can be demonstrated.

CHICKEN RAISING

In our state the poultry industry is one of the most profitable. The seasons are long and winters not cold. Chickens hatched in March will lay in August, and if given the proper care will continue to lay all winter. The price of eggs varies from thirty to sixty cents a dozen. Last year our seventh-grade boys built a Philo coop, cared for seventy chickens from the time they came from the egg in March until the middle of June. Fourth- and fifth-grade children assisted the instructor in caring for two hundred more. The instructor's home is just off the campus where it is possible to take the children for lessons. We have succeeded in interesting upward of 200 children in raising chickens at home. After they have had instruction in running an incubator, a brooder, and in caring for chickens, they are able to make a success at home. Last year a boy in the third grade opened an account with his father and before the summer was over he had paid for his chickens, feed, etc., and had five dollars in cash. This was done with less than a dozen hens. This year he starts out with a larger flock and with better prospects of success. The school publishes bulletins on chicken-raising, which are given to the children. The profit which parents derive from these is shown by the frequent calls for advice from the instructor. It might be added here that bulletins along other lines are published and we find this a profitable way of reaching the parents.

THE FUTURE

The results of the past warrant our looking forward to a future in which many more life-activities shall be brought to the child. We have demonstrated that this can be done without any loss to those branches which are known as the fundamentals. In fact we are convinced that these branches take on a deeper meaning and become more vital to the child when associated with some problem which he will meet later in life. When the problems of arithmetic teach a child facts that are worth knowing, arithmetic is truly

a practical subject. Geography is no longer associated with past forces or agencies, but with phenomena taking place about us every day. Landscape gardening will be carried into the home with an effort to induce every child to make his home surroundings as beautiful as possible. Last year this work was started when a local firm gave to each child an elm and a maple tree which were to be planted in the home yard under the direction of the school. This year Arbor Day will include not only the planting of trees and ornamental shrubs, but the laying-out of walks, flower beds, transplanting of trees, application of paint, and various other methods of making the home beautiful. Fruit trees can be purchased at a reasonable price. We shall be able to supply a number of children with apple and plum trees. Thru an appeal to the parents we hope to see a large number of back yards growing fruit trees where now rubbish and scrub poplar are found. The principal of the school has recently been collecting data regarding the cost of living with the idea of giving children in the upper grades a knowledge of purchasing and selling. A correlation with the domestic science department will make this possible. As in the past we have succeeded in inducing parents to consult us regarding problems of chicken-raising, the garden, and orchard, so in the future we hope to extend this co-operation to further economic problems of the home. Parents are not averse to their children's remaining in school when they feel that the school is giving the child something which is of value to the home and will be of value to the child in later life. Many a boy wastes his entire summer vacation on the excuse that he is unable to find employment. This spring we shall ascertain just what each boy has been doing previous summers, what kind of service he has given, and what he would like to do this coming summer. With this record before us, we shall endeavor to locate him with some firm where his services will receive ample remuneration and the work will be to his liking. For example, we have three or four eighth-grade boys who have considerable efficiency in electricity. Local electrical houses are frequently able and glad to secure such boys. Office and errand boys, besides assisting the parents in the way of three or four dollars a week, are able to learn much that will be of service to them later.

On the campus today we have four or five Jersey cows and two horses. We are organizing our work in such a way that it will be possible to have a small flock of sheep, several varieties of chickens, and from time to time to add other domestic animals. The water rights which are under negotiation will make this a possibility in the very near future. Our farm machinery today is about what the ordinary farmer has, but with the addition of several new pieces we shall be able to teach our children the best methods of cultivation. The introduction of more domestic animals and farm machinery will mean that buildings must be constructed. The work in manual training is of such a nature that but little or no outside labor will be required. The eighth-grade boys have just installed a system of bells in our school building and are now engaged in running gas pipes to different rooms. No phase of school work is of more interest to our boys than electricity. An instructor in the electrical department of the university gives two hours a week to practical instruction in electricity. We believe it is possible to give an eighth-grade boy a training along these lines which will fit him to make more than an ordinary living when he leaves us. Reading meters, fixing steam pipes, electric lights, and heaters are a part of our present work. Results in the past justify us in furthering this work. In brief, our sole aim is to give a child a training which will fit him for life in its broadest sense. We are not believers in the trade school; but we do believe that this practical work cannot only be done along with the fundamentals but that it will strengthen them.

D. B. PARKINSON, president of Southern Illinois Normal University, Carbondale, Ill.

I. An increased demand for agricultural education:

1. In tilling and preserving the virgin soil.
2. In restoring depleted soil to its former fertility.

3. In spreading a knowledge of a more rational and scientific use of farm land, farm labor, and farm interests generally.

4. In securing the conservation of nature's material and forces as applied to farm resources of all kinds, including poultry, bee-culture, and stock-raising in all its phases.

5. In showing the relative value of rural conditions and environment as compared with other vocations.

II. The province of the agricultural college in meeting the above demand:

1. In conducting the more advanced forms of experimentation along all agricultural and horticultural lines.

2. In the more elaborate and exhaustive research work and the compilation of valuable data for general distribution in the form of reports and bulletins.

3. In setting forth the comparative values of farm products, farm life, and farm investments.

4. The place above all others where those who are interested in agricultural problems may go to set their watches, and keep in step with the progress of the time.

III. The place of the state normal school in this great field:

1. To train young people in the processes of instructing and directing the children and youth of our land in the things most conducive to their wisest development, touching their present and future needs.

2. To aid in establishing rational courses of study for the public schools, especially in rural and village schools.

3. To instill into the minds of their students the many attractions and advantages of farm life, emphasizing the dignity, independence, and remunerative vocation of the tiller of the soil, and the breeder of domestic animals.

4. To offer courses of study for those who are to teach in the communities that they may possess a body of knowledge peculiar to these regions, and become able to teach and direct the activities of the children of these favored regions.

5. So to broaden and modify its field of instruction and training that these interests may receive their due consideration.

6. To modify its courses, especially in biology, zoölogy, botany, chemistry, and physics, that these may bear more directly on the preparation of these teachers that they may be of maximum service to the rural community in which they labor.

7. To offer courses in farm management as well as in school management, including many details peculiar to the successful manipulation of farm affairs.

8. To offer short courses in stock-rearing, the care of stock, the improvement of stock, and the marketing of stock. (See courses of study.)

IV. To meet this demand the normal school should broaden its field so as to have a well-equipped agricultural department including a school farm:

1. For the purpose of giving concrete instruction to prospective rural teachers in the treatment and fertilization of soils, the propagation of plants and nursery stock, the planting of farm crops with the culture thereof; the rearing and care of poultry, bees, and blooded farm animals, not, however, as comprehensively as in the state agricultural college.

2. Providing a complete laboratory for the purpose of studying soil-chemistry and soil-physics in their simpler forms, besides the various forms of fertilization that may be practiced for these shorter courses. The wise use of demonstration plots on the school farm.

3. To analyze specimens of soil obtained from the homes of students taking these courses, thus furnishing a practical phase of the work that will appeal to everyone taking the course.

V. In addition, the state normal school would do well to have on its farm an ideal country home, not too expensive, where may be seen the various features of a modern farm house, having all the conveniences, comforts, and equipment that may be seen in a typical rural home. This home should be in charge of the director of the farm, while much of the care thereof may be given to representatives of the agricultural and household arts departments, who for the time may occupy this home.

VI. And last, but not least, there should be an ideal rural school building on this farm, sufficiently removed from the environment of the school proper that it may represent, as far as possible, the conditions of the actual rural school, and offer opportunity for training in rural school teaching.

To the late normal-school president, Alfred Bayliss, we in Illinois, are indebted for the first attempt in Illinois to have such a school. However, his school was removed several miles from the normal school, which in some respects was more ideal than to have it on the school grounds.

VII. Allow me to state in conclusion that a state normal school having courses of study especially for rural teachers, a typical farm home, and a typical rural school, as described above, would add immensely to the establishing of a public sentiment in favor of farm life and farm industry, commensurate with their value to the state and the nation in conserving their resources and their opportunities for service.

STANDARDS OF MEASURING THE EFFICIENCY OF NORMAL-SCHOOL STUDENTS

CHARLES MC KENNY, PRESIDENT OF MICHIGAN STATE NORMAL COLLEGE, YPSILANTI, MICH.

The question which I am to discuss is a thoroly practical one. It does not admit of much fine phrasing or emotional oratory. It is a simple, direct, and practical problem which every normal school has to face. The purpose of the normal schools is to fit teachers. The public so understands it. The efficiency with which they do their work will measure to a very large degree the progress of public education.

There are three parties deeply concerned in the standards which the normal school sets up as a measure of efficiency of its students. The schools to which the teachers go are concerned. A low standard of efficiency in the normal schools means a constant stream of relatively inefficient teachers pouring into the public schools. A high standard of efficiency means that new life and vigor are injected into public education at every graduating season at the normal schools. But the schools are not alone interested. Every normal-school student is also an interested party. A low standard of efficiency in a normal school results in the stamp of approval being put upon candidates who are unqualified for public-school service. They are recommended to positions, find themselves unequal to the situations, and are consequently disappointed, humiliated, and perhaps utterly disheartened. Finally, the welfare of the normal school is involved in its standard of efficiency. A school that does not set a high standard of qualification for its students soon makes for itself an unenviable reputation in the community which it serves. Its recommendations are discounted by superintendents and school boards, and its graduates are passed by. Such a school brings reproach upon professional training and offers no incentive to prospective teachers to enter its halls to prepare for their future work. The worst possible educational influence in any state or community is a normal school with low standards of scholarship and professional training. It is, then, of prime importance that normal schools see to it that their standard of efficiency is the highest that is consistent with the community which they serve and the conditions under which they work.

Accepting, then, that the standard of efficiency should be high, we come to the question of the sources from which such a standard can be derived and the elements which compose it. In short, by what standard shall normal-school students be measured? Clearly, this standard should be the result of the adjustment of the professional ideals of the normal school to the practical situations to be met in the public school which it serves.

The normal school is an institution supposedly filled with men and women teachers of professional insight and standing. These teachers have worked out their conceptions of educational principles and methods. These principles and methods are supposedly exemplified in the training school, and in this training school students are required to teach in harmony with the professional ideals and standards of the school.

Within limits, all this is right and proper. Individuals and schools must have ideals, and, to a reasonable degree, must stand by them, but it is just as important to keep in mind that individuals and institutions do not live for themselves. They live for society. Their ideals are of little social value unless they work out into social consciousness and procedure.

It is especially true that a normal school does not exist for itself, but for the state, and since it must articulate with public education, it must know what public education is. The great danger with normal schools is the tendency to live within themselves, and to measure themselves by themselves rather than by social conditions in the state at large. For this reason, it is necessary for normal-school teachers and administrators to visit public schools, and, from first-hand knowledge, know the conditions which prevail, the standards which are set up, and the demands which are made. I realize from experience the difficulty of getting normal-school teachers to do such visitation. Normal-school teachers are not wholly to blame if they do not care to take money out of their limited salaries to pay traveling expenses involved in visiting schools. It must also be remembered that their interest in the school work which they are doing, and its pressing necessity, often make them feel that they cannot spare the time for school visitation. Realizing the value of such visitation, both for the schools visited and for the normal school itself, the Normal School Regents of Wisconsin this year authorized the president and five members of the faculty of each school to visit public schools at the expense of the board. Each teacher was requested to spend a week in such visitation, and the president two weeks. The results were so gratifying that for the second semester of this year seven members of the faculty are authorized to spend a week each in visiting schools. By this system of visitation, the normal schools of Wisconsin hope to evolve a standard of efficiency which shall be the resultant of the professional insight and principles of the normal school and the practical school conditions to which the graduates of the normal schools go.

But what should be the elements in a standard of efficiency by which normal-school pupils are to be measured? Is it possible to draw up specifications which shall in any adequate way measure the probable success of a student-in-training when she goes out into actual school work? Many attempts have been made to do so. All such standards have their elements of strength and of weakness. I shall venture to present such a standard to this department. In formulating a standard by which students are to be judged, several important considerations must be observed.

First, the standard should include only the fundamental requisites of a successful teacher. Overanalyses and refinements are both useless and dangerous. Second, the fundamentals should be strongly stressed, altho they may be associated with minor defects. Third, it seems likely that no attempt should be made to put relative mathematical values upon the different qualifications constituting the standard. I have seen standards for measuring the efficiency of teachers which gave relative value to the several elements of character constituting the standard, the sum of values totaling one hundred. For example, sympathy was given a rating of two, health two, voice two, professional attitudes and interests two. One defect of such a standard lies in the fact that the final or total percentage is of little or no value in determining the rank of the teacher. On the standard referred to, with a zero rating in sympathy, tact, judicial mindedness, health, and self-control, a teacher might still have a final average of ninety which, mathematically considered, would put her in class A, and yet, lacking the qualities named, she would be unworthy of consideration for a school position. It would seem wiser to mark each item in the standard on the scale of one hundred, or by the commonly used letters, E, G, F, and P. A student falling below seventy-five or receiving a grade of "poor" in any essential quality of a teacher would certainly be in the doubtful class. An examination of a student's card so marked would enable one to form a reasonably accurate judgment as to the fitness of the student to enter upon the work of teaching.

The following standard has been constructed in harmony with the principles suggested:

A STANDARD FOR MEASURING THE EFFICIENCY OF NORMAL-SCHOOL STUDENTS

Physical factors—
- Personal appearance
- Health
- Voice
- Physical defects
- Personal habits

Intellectual factors—
- Native ability
- Scholarship
- Intellectual habits
- Capacity for growth

Moral factors—
- Integrity
- Self-control
- Judicial sense
- Sense of responsibility
- Loyalty

Temperamental factors—
- Enthusiasm
- Optimism
- Sympathy

Executive factors—
- Energy
- Resourcefulness
- Dispatch
- Co-operation: ability to co-operate and to secure co-operation
- Tact
- Class- and schoolroom management
- Pertinacity

Social factors—
- Social disposition
- Refinement
- Scope of interests (narrow or broad?)

Teaching factors—
- Insight into child nature and school problems
- Preparation of lessons:
  - General
  - Daily
- Technique of presentation
- Skill in questioning
- Participation of pupils in recitation
- Practical application of lessons
- Thoroness
- Method of assignment
- Interest of pupils
- Progress of pupils
- Use of language

The aim has been to chart under the fewest headings those essential qualities which unite in a good teacher. Undoubtedly, it has imperfections. Such a standard is to some degree an individual matter. Each supervisor or superintendent here would be quick to suggest modifications. I am not contending for this particular standard, but for some standard.

A standard like the one here presented would have at least four practical uses in the normal school:

First, it would make a good basis for discussion in the pedagogy classes. It would be worth while to both teacher and class to go over, in a searching way, the elements in character suggested in such a standard. In the second place, it would give the student a good basis for judging the efficiency of the teaching seen in the normal school, on the part of both the normal department and the training school. Third, if placed in the hands of a student teacher, it would constitute a detailed standard by which she could estimate her own teaching, and it would also furnish a basis for the criticisms by critics and supervisors of practice teaching. Fourth, carefully filled out by proper persons, it could be placed on file as a part of the student's record. Probably no single member of a faculty would have all the information necessary to fill out the card intelligently and justly. It should be the duty of someone connected with the administrative department to get the information from those who possess it, and make the record clear and trustworthy. Fewer normal-school graduates would be recommended to wrong places if such a card were in the possession of the committee on appointments.

Having settled upon a standard of judging, the next difficulty which the normal school faces is to give the student sufficient opportunity for testing her ability to measure up to the standard. The matter is relatively easy until we come to the question of leadership and actual teaching skill. These can be tested nowhere so well as in the schoolroom—in the actual work of school management and class teaching; in fact, they can be rightly tested nowhere else. It is just here where the average normal school is weakest. I in no sense minimize the importance of the model school or training school of the normal school. It is an indispensable adjunct, and much of the value of normal-school training is derived from it. The great misfortune is that our practice schools are inadequate to the work which they are called upon to do. They are, at best, attended by a few hundred

children—too often very few. The limited attendance in the practice school and the large number of students needing practice teaching leads to the subdivision of classes, and the assignment of a student to a group of ten to fifteen children, at the most, whom he teaches in a small recitation room, in only a single subject, which he has carefully prepared under the direction of a supervisor. Almost every element of public-school teaching is lacking. Under such conditions, it is absolutely impossible to test the most essential qualification of a young teacher, namely, leadership. Normal-school graduates do not fail from lack of knowledge or of method. Their failures come from a lack of ability to control a school, a quality which I have called leadership. They are not resourceful, and are often helpless before a room full of children.

I am aware that in most cases the normal school is unable to better this condition. It is quite impossible for most of them to increase the attendance of the training school. This is especially true in the smaller towns, where so many normal schools are located. Some schools, however, fortunately situated, have adopted courses which give extensive practice opportunities to their students. Schools located in large cities are sometimes able to make arrangements by which a part of the practice teaching is done in the city system. This is certainly a great advantage to the school and to the student teachers. It makes it possible for the practice teacher to work with large classes of children under actual school conditions, and it gives the school an opportunity to judge of its students not only with respect to the preparation of subject-matter, but also with respect to class methods and school management.

To be sure, there are disadvantages in such a plan. The normal-school supervisors necessarily have not the freedom in dealing with the curriculum and methods of instruction that they have in their own practice schools. They are bound by the courses of study of the system in which they work, and they are not free to criticize the methods used by the teachers in the schools, tho they may be faulty. A practice teacher is sure to see some poor teaching, concerning which the supervisor is obliged to be silent. Nevertheless, these disadvantages are more than offset by the value which comes to the student from working under conditions such as he will meet after leaving the school. From nearly fifteen years of experience with practice teachers working in city systems, as well as in the practice school of the normal school, I can speak with some confidence of the great benefit that it would be to any normal school to establish such relations with a city system.

It has been our experience that the best results in practice teaching are obtained by assigning students to at least half-day practice, rather than to a few minutes or an hour per day, which is the too common custom. A student who drops into a grade for an hour to teach a class and immediately leaves when her class is over to report to some recitation or do some other

school duty, cannot get into the spirit of the work; she cannot sense the atmosphere of the school, nor establish that relationship between herself and the children which is necessary to good teaching. It is the custom at Milwaukee to assign students to practice teaching for a half-day. They report at the same time as the regular teacher, remain during the half-day session, and teach three or four different classes. The responsibility of maintaining discipline is thrown upon them as much as they are able to stand, and in all respects the conditions are made like regular school conditions to the extent that the inexperienced teacher is able to meet them. By this means, we test a student teacher by the most severe of all tests, the ability to control a room and, at the same time, do successful teaching.

Having spoken of the conditions under which students should be tested, it remains to say a word concerning the character of the supervisor who is to pass judgment upon the pedagogical fledgeling. Nowhere in the normal-school economy is there needed more breadth of view, sanity of judgment, keenness, insight, and firmness of decision coupled with kindness of heart, than in the office of critic teacher or supervisor of practice. Such a supervisor must be broad enough to see that there is more than one way of doing a thing. He must be liberal enough to welcome ingenuity, initiative, and resourcefulness on the part of practice teachers. He must not be overinsistent that a thing shall be done his particular way, provided, of course, that the thing is done in a good way. He must be free from sentimentality and soft sympathy, which would keep him from giving the needful criticism, tho severe. He should have the courage to tell students the facts that they need to know. At the same time, he must have that kindness of heart which will not bruise the broken reed, and the tact which will enable him to give the needed help, without undue hurting. He should have the rare ability of distinguishing between the minor defects, or the minor virtues as well, and the great essential qualities which make for good teaching. We all have known critic teachers who, because of some mote in the mind's eye, were unable to see the splendid possibilities wrapped up in a young man or woman. Above all, the supervisor must have what we may call the prophetic imagination; that is, he must have the ability to see a student at work under ordinary school conditions; he must see her in a room of her own with forty children to control, with her plans to make, the seat work to organize, the discipline to maintain, the enthusiasm to kindle, and the intellectual results to secure. Only as he in his imagination can project this student into the future, under normal conditions of school work, is he qualified to pass upon her qualifications for graduation and teaching. This gift of prophecy is a rare gift. It involves so much knowledge of school conditions, such a knowledge of how former students have turned out, such careful discrimination between the less significant and the fundamental traits of character. Fortunate is the normal school which has such a person at the head of the practice depart-

ment, and manifoldly fortunate is the one which has, in addition, such a critic in each grade.

Let me briefly sum up what I have attempted to say:

The normal school must set up a standard of efficiency for its students. The welfare of the community, of the student, and of the school demands it. That standard must be the resultant of the theoretical ideals of the school, toned and subdued by the practical conditions of public-school teaching. The standard should lay emphasis upon those fundamental qualifications—physical, moral, intellectual, and social—which are essential in a teacher, and should minimize those minor traits of character which, tho they subtract from, do not overbalance the more important qualifications. The normal schools must give suitable and ample opportunity for the practice teacher to try himself out, and, lastly, the one who passes upon the qualifications must possess sanity of mind, breadth of view, tenderness of heart, courage, and prophetic vision.

PRELIMINARY REPORT OF THE COMMITTEE OF ELEVEN ON A PLAN OF NORMAL-SCHOOL STATISTICS

HOMER H. SEERLEY, PRESIDENT, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA

Preliminary work.—This committee was organized by President W. J. Hawkins following the meeting of the Department of Normal Schools at San Francisco in July, 1911. The states were divided into nine districts at the time of the appointment and each member was requested to study the entire question from the standpoint of the states assigned to him, endeavoring to determine the opinions and conclusions of all the normal schools in that district regarding the points that ought to be selected as a basis of reasonable and comparative statistics. The chairman of the committee drew up a preliminary plan that was to be a partial basis of the problems to be investigated. Copies of these were sent to each member in sufficient numbers to supply every normal school in his district, hoping thereby to secure, at an early day, as complete an agreement as the difficulties undertaken would permit. This plan was an attempt to include in the outline all the different items that seemed possible to be desired by any normal school in the United States, if it sought information regarding the organization, support, management, or development of all the others. It was recognized at the outset that there were large variations in the standards and ideals of this class of schools, but six months' study and consideration have magnified the complexity of the problems undertaken, have shown to what a remarkable degree many of these schools are specifically provincial, and have emphasized the fact that they have not developed either institutional spirit or national ideas of service. As long as their

function is assumed to be local and state rather than universal and national, as long as their standards are minified rather than magnified, as long as their work is conceived to be absolutely individual rather than institutional, it is hardly to be expected that they would care to be measured or to be estimated by any system of statistics.

Classification and standards.—When the members of the committee began to hear from their districts they soon ascertained that there were decided differences of opinion regarding the importance, the value, the need, the character, and the utility of such statistics. This information, having come to the chairman in such potent ways and with such evidently sincere motives, has brought him to the conclusion that a uniform system of statistics for all state normal schools is probably impossible and that the first undertaking must include a system of classification of these schools whereby their salient features may be recognized and their standards and ideals accepted as bases of comprehending and of measuring them.

State normal schools are now more numerous and probably more essential and more appreciated than any other kinds of state educational institutions. They deal with vital problems, they return immediate results, and they are more definitely responsible to public opinion than other educational movements can be. Their organization is simple, their support is direct, their management is executive in most instances, and their conception of their province is definite and distinct. They seem to be prevented from having an institutional conception of education despite their standards of excellence, and they are not likely to have a national status or to seek national recognition. With all their popularity, with all their practicability, with all their success, with all their prospects and privileges, the majority of them do not seem to seek to enlarge their importance as public, organized efforts for improving civilization, and they are, therefore, not aiming to develop their field of activity or to increase their usefulness, or to demand their part in the national and state opportunities that all other higher education inherits.

These facts have been very prominent in the efforts that have been put forth the past few years endeavoring to secure attention from the Congress of the United States to the efficiency of the state normal schools in hastening the day of a sensible, effective vocational education for public-school teachers so that they may be qualified to bring this kind of education to the masses thru the public schools. The efforts that have been made to pass Senate Bill Number 3 (the Page Bill) and its predecessors, so as to include the state normal schools as a factor in this great national movement, have not been as productive of results as would have been the case were these schools as national as are the state universities and the state agricultural and mechanical colleges.

A proper study of statistics, a proper classification of organized efforts, a proper conception of what is being done everywhere in the endeavor to

train and to educate teachers must enlarge the horizon of these schools, must compel them to recognize their chances, must urge them to enlarge their field of usefulness and power, and must enable them to enter upon activities and possibilities that would make it possible for them to participate in the remarkable development that the United States is receiving. They would thus keep pace with the progress and the largeness that these days of intense thought and application permit, and continuous development and improvement would be the result. Without this view of conditions and undertakings, without this knowledge of what is actually going on elsewhere, without this touch with comparative standards and undertakings, without this chance to keep abreast with the times, this kind of educational work will remain provincial, theoretical, and indeterminate, when its very opportunities indicate that it ought to be the broadest, the largest, and the best that the age affords.

Groups of state normal schools.—With these reflections in mind, and with the hope of advancing the greater interests of all, there is here proposed a scheme of classification that may roughly provide for a better understanding and may enable the different states to ascertain just where they stand regarding their plans for teacher education. This scheme, if adopted, will not attempt to decide which kind of normal school is the best; it will not undertake to rank schools as regards importance, or size, or expenditure, or course of study, tho these facts may be each ascertained; it will simply recognize the fact that there are varieties of state normal schools and will undertake the work of setting out in a plain way these differentiations so they may be understood by the legislator, the publicist, and the educator. With this explanation, the following classes of schools appear to exist under the statutory title of state normal schools:

1. State normal schools that could be properly named *state normal training schools* because they interpret their function to be the preparation of teachers for the elementary public schools. They receive high-school graduates as students and the work to be done includes two years of intensive preparation involving (1) instruction in the theory of the processes of elementary teaching, and (2) a notable and extensive development of quantitative experience in teaching by a broad and continuous training thru practice under a moderate system of supervisors and critic teachers.

2. State normal schools that could be properly designated as *state normal schools* in general because they undertake to give (1) academic instruction in the subjects of study deemed essential to a public-school elementary teacher, (2) theoretical and method instruction in professional lines considered necessary for a teacher to know, and (3) a limited, definite, qualitative amount of training in teaching in a carefully organized and thoroly conducted training school where there is constant intensive direction by supervisors and critic teachers. These normal schools may or may not limit themselves to students that are high-school graduates

and they may assume the opportunity to prepare both city and country teachers.

3. State normal schools that admit other students besides those desiring to be teachers and which could be properly classified as *state normal and academic institutions*. Their work includes both secondary and higher phases of instruction, having as its object more of education for life than of training for vocation. To these normal schools comes any student of any grade of qualification with any purpose in mind. Here is found class work in psychology, theory and philosophy of education, and methods of instruction for those who wish to prepare to be teachers, and also a well-organized training school where a limited amount of practice in teaching is obtainable. In many of this class of schools, academic, scientific, literary, and commercial studies have more patronage than the so-called teacher courses.

4. State normal schools that are of such a grade in their scholastic work and in their organization that they may be properly called *state teachers' colleges*. They do not plan their courses for other students than those who desire to enter education as a vocation and they have faculties organized into departments with the ranks and the distinctions commonly found in colleges and universities. They give as their highest honor a degree equivalent to Bachelor of Arts, and as their lowest honor a diploma for a two-year course beyond high-school graduation. The higher diploma indicates the qualifications demanded of superintendents, principals, and high-school teachers, and the lower diploma indicates preparation for elementary and special teacher work in public schools. These colleges have at times a real state normal-school department for the preparation of persons of maturity, not high-school graduates, for elementary and country school work in public schools. In these colleges the training school consists of high school, grammar-grade school, primary school, and kindergarten with all the equipment that such an organization would require, and the amount of practice in teaching depends upon the attainments and the success of the student, the same as would be required in satisfying the requirements of the department of English or the department of mathematics. Each student prepares to be some kind of a special teacher rather than to accept any kind of general teaching, and hence the work done in practice is qualitative and intensive in all its characteristics.

The plan of statistics proposed.—In the original outline submitted to the state normal schools of the United States thru the members of the Committee of Eleven the following were the points emphasized with numerous subdivisions and opportunities for additional subdivisions if they were deemed desirable:

1. Income Statistics
   a) Sources of income for support
   b) Sources of income for building
   c) Variety of funds required by the state system

2. Expenditure Statistics
   a) Instruction
   b) Maintenance
   c) Repairs and improvements
   d) Building
   e) Equipment
   f) Library, etc.
3. Faculty Statistics
   a) Number and distribution as to department of work
   b) Other officers and employees in the service
   c) Summer-term faculty, number and distribution
4. Student Statistics
   a) College graduates
   b) High-school graduates
   c) Other grades studying to be teachers
   d) The kind of teacher that these students are desirous of becoming—kindergartner, primary, etc.
5. Training Department Statistics
   a) High school
   b) Grammar school
   c) Primary school
   d) Kindergarten
6. Graduating Class Statistics
   a) High-school teachers
   b) Grammar-school teachers
   c) Primary teachers
   d) Kindergarten teachers
   e) Other special teachers such as music teachers, domestic science teachers, etc.
7. Expense of instruction per capita for each branch taught and each kind of work required—on the basis of one-third of a year. (This was due to the fact that some schools had the year plan, some the semester plan, and some the term plan of organization.)
8. Course of Study Statistics
   a) Variety of courses
   b) Length of courses
   c) Admission to courses
   d) Diplomas offered as to variety and kind
9. Library Statistics
   a) Volumes
   b) Periodicals
   c) Pamphlets
   d) Employees
10. Plant and Equipment Statistics
   a) Grounds
   b) Plant
   c) Furniture
   d) Apparatus
   e) Museums
11. Economic use of the Plant Statistics
   a) Schoolrooms
   b) Hours used per day
   c) Laboratories
   d) Hours used per day
   e) Regular assignment for each teacher
   f) Regular assignment for officers, employees, etc.

Conclusion.—It can be seen that these points for statistical information would not be considered as applying very satisfactorily or generically to all the different classes of state normal schools already mentioned. There remain, therefore, several solutions to the problems involved if the work proposed is at all worth doing. A few of these are suggested:

1. Classify the state normal schools on some acceptable basis of differentiation and then work out a system of suitable and reasonable statistics for each of the classes designated.

2. Adopt a very few points that seem to be in common and be satisfied with the very meager information thus given as all that can be deservedly said and recorded concerning this kind of state education.

3. Drop the entire proposition as of not sufficient importance and value to deserve either attention or interest, let alone the large amount of committee and personal work that such an investigation must regularly and systematically demand of this department.

Respectfully submitted,

Committee

Homer H. Seerley, *Chairman*, Cedar Falls, Iowa.
David B. Johnson, Rock Hill, S.C.
E. Oram Lyte, Millersville, Pa.
David Felmley, Normal, Ill.
Washington S. Dearmont, Cape Girardeau, Mo.
Waite A. Shoemaker, St. Cloud, Minn.
Harry F. Estill, Huntsville, Tex.
Z. X. Snyder, Greeley, Colo.
Jesse F. Millspaugh, Los Angeles, Cal.
James M. Green, Trenton, N.J.
Ernest L. Silver, Plymouth, N.H.

SECRETARY'S MINUTES

CHICAGO MEETING

OFFICERS

President—W. J. Hawkins, president, State Normal School ..... Warrensburg, Mo.
Vice-President—A. J. Matthews, president, State Normal School ..... Tempe, Ariz.
Secretary—Martha Buck, Southern Illinois State Normal School ..... Carbondale, Ill.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The opening session of the Department of Normal Schools was held in the Florentine Room, Congress Hotel, Chicago, Ill., on Tuesday, July 9.

The meeting was called to order at 2:30 P.M. by W. J. Hawkins, president of the State Normal School, Warrensburg, Mo. In the absence of the secretary, Miss Martha Buck, the president appointed D. B. Parkinson, president of the Southern Illinois Normal University, Carbondale, Ill., secretary *pro tempore*.

The following committees were appointed by the president to report at the meeting on Thursday.

COMMITTEE ON NOMINATIONS

Guy E. Maxwell, president, State Normal School, Winona, Minn.
W. S. Dearmont, president, State Normal School, Cape Girardeau, Mo.
Joseph H. Hill, president, State Normal School, Emporia, Kans.

COMMITTEE ON RESOLUTIONS

D. W. Hayes, president, Peru State Normal School, Peru, Nebr.
G. W. Nash, president, State Normal and Industrial School, Aberdeen, S.Dak.
J. G. Crabbe, president, Eastern Kentucky State Normal School, Richmond, Ky.
D. B. Parkinson, president, Southern Illinois Normal University, Carbondale, Ill.

After the above appointments, the president called for each subtopic under the general topic, "The Function of the Normal School." The speakers were all present except President Snyder, of Colorado.

A. "In Academic Education," by John A. H. Keith, president of the State Normal School, Oshkosh, Wis.

B. "In the Special Training of Teachers for the Rural Schools," by D. W. Hayes, president of the State Normal School, Peru, Nebr.

C. "In Relating Theory and Practice Teaching so as to Secure Teaching Efficiency," by Alfred C. Thompson, principal of the State Normal and Training School, Brockport, N.Y.

D. "In Training Teachers for the Public Welfare—Civic, Social, Moral, Religious," by W. S. Dearmont, president of the State Normal School, Cape Girardeau, Mo.

J. G. Crabbe, president of the State Normal School, Richmond, Ky., read the following paper: "Securing and Maintaining Efficiency in the Teaching Force of Normal Schools."

Z. X. Snyder, president of the State Normal School, Greeley, Colo., being absent, the topic "Student Activities in State Normal Schools" was passed.

Homer H. Seerley, chairman of the committee, and president of Iowa State Teachers College, Cedar Falls, Iowa, submitted the "First Report of the Committee of Eleven on a Plan of Normal-School Statistics."

President Crabbe moved the continuation of the committee for further study. This motion was carried after a short discussion.

President Seerley moved that a special committee be appointed to make a study of "The Standards That Are Agreed upon in the Proper Making of a Teacher," which motion was carried, and the president authorized to appoint such a committee.

The meeting then adjourned.

SECOND SESSION—THURSDAY AFTERNOON, JULY 11, 1912

The second session of the Normal School Department was called to order by President Hawkins in the Florentine Room of the Congress Hotel, Chicago, Ill., at 2:30 P.M.

The minutes of the meeting held on Tuesday were then read and approved.

The general topic under discussion was "City Training Schools and Their Management."

Grant B. Grumbine, president of the State Normal School, Alva, Okla., presented the first topic as follows: "The Function of the Normal School in Training Public-School Supervisors in Technical Subjects: Drawing, Manual Training, Household Arts, Music, etc."

Guy E. Maxwell, president of the State Normal School, Winona, Minn., discussed this paper.

The second topic, "The Problem of Relating Theory to Observation and Practice in the Training of Teachers for City Schools," was discussed under four heads, as follows:

A. "The Amount and Distribution of Time Devoted to Practice Teaching."

B. "The Best Method of Directing the Studies of Observation and Practice."

C. "The School Principal's Share in the Training of Teachers Prior to Their Appointment."

D. "The Measure of Responsibility Which Should Fall to Special Supervisors in the Training of Teachers."

William B. Owen, principal of the Chicago Normal School, Chicago, Ill., who was to discuss the first topic, not being present, the second paper was called for, which was to be delivered by J. Monroe Willard, principal of the Philadelphia Normal School for Girls, Philadelphia, Pa. Mr. Willard not being present, his paper was read by the secretary.

The last two topics were discussed from the floor.

At this point Principal Owen appeared and discussed the topic assigned him.

The president next called for the report of the nominating committee which was read by the secretary as follows:

For *President*—John A. H. Keith, president, State Normal School, Oshkosh, Wis.
For *Vice-President*—William E. Wilson, principal, Washington State Normal School, Ellensburg, Wash.
For *Secretary*—Miss Myrtle Kneffer, Cape Girardeau, Mo.

The report was adopted.

The Committee on Resolutions next made their report which was adopted, as follows:

Resolved:

1. That the Department of Normal Schools of the National Education Association once more gratefully acknowledges the cordial general recognition of the great work being done by the normal schools thruout the United States in preparing teachers for all grades in the public schools to the end that the schools everywhere may become efficient. Recognizing this responsibility, the normal school pledges itself anew: "This one thing I do."

2. It reaffirms its faith and confidence in the aims and purposes of the normal schools as set forth in the creed of this department promulgated in 1908, which holds that their function is distinctively the training of teachers for both elementary and secondary schools; the establishment of departments of special research; the introduction of courses of training for educational leadership; and a broadening of the normal-school curriculum to meet the needs of the broadening curriculum of the public schools. For this purpose more stress should be placed upon the training school as representing the heart of the school, which gives life and character to its work. This department believes that the normal schools should extricate themselves from all dominating influences that tend to make the secondary courses of study merely preparatory courses for college entrance. Instead, the normal idea should be to reach thru its student teachers the child yonder in home, in school, on playground, in the market place, the forum, the church, and the state: the finished product of home, community, and school. The normal school must have in mind that ideal of larger service which the child is to be best fitted to render, in terms of his own peculiar environment.

3. Since the elementary school is of first importance in our American school system; and since, in the effort to keep this school up to a proper standard it has been necessary to add many new subjects and give them place on the daily program; and since all the subjects and subject-matter of the earlier period have been retained, making an overcrowded program that does not give sufficient time to teachers to properly ground pupils in subject-matter or the principles of conduct, and to give accuracy of knowledge and stability of character, it is the opinion of this body that a process of correlation, integration, and elimination is necessary that teachers may have a workable program. This is rightfully the work of the normal schools and this department recommends the entering upon such research work as will determine what subjects and subject-matter have real educative value, and which are without such value and have place in the curriculum.

4. Since a committee of this department has been making investigations concerning appropriate normal-school statistics and has made a report of progress, it urges this committee to co-operate with the National Bureau of Education in order to devise if possible a simple but comprehensive uniform system of normal-school statistics.

5. This department commends and approves United States Senate bill concerning vocational training.

The meeting then adjourned.

D. B. Parkinson, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

TOPIC: THE FUNCTION OF THE NORMAL SCHOOL

A. IN ACADEMIC EDUCATION

JOHN A. H. KEITH, PRESIDENT OF STATE NORMAL SCHOOL, OSHKOSH, WIS.

Our word academic comes from the name of the grove near Athens in which Plato taught, and has now, as an adjective, three distinct meanings, viz., first, conforming to scholastic traditions and rules; second, literary or classical in distinction from technical or scientific; third, belonging to a higher institution of learning. I could not bring myself to discuss the "function of the normal school in education that conforms to scholastic traditions and rules"; nor yet to discuss the "function of the normal school in education which is literary or classical, in distinction from technical or scientific," because, in our democracy, there is no place for education that conforms to scholastic traditions or that is exclusively literary or classical. I think the chairman wanted me to discuss the "function of the normal school in higher education," and I accordingly address myself to that topic.

Ever since high-school graduates began to come to the normal schools in significant numbers, the normal schools have sought some accredited relation with the colleges and universities. The contention was and is that two years of work in a normal school ought to be and is the substantial equivalent of two years of work in college. The growth of the elective system together with the lessening of the foreign-language requirements in colleges and the improvement in subject-matter and teaching in the normal schools has made the contention substantially true in some college courses. No normal school would seek in a two-year course to give the same work that is given in a college or to give the work that is common to the two courses in the same way. Despite this difference, nearly every state normal school in the country has accredited relations with colleges and universities, and this fact is a substantial recognition of the work of the normal school as being of college grade.

In some sections of our country the colleges and universities were slow to recognize the normal schools. A dozen years ago, a normal-school diploma simply entitled a person to take the entrance examinations at our leading universities. This fact of tardy recognition was like "sand under the saddle" to normal-school graduates, teachers, and presidents. The high schools were multiplying rapidly, supreme courts held that high schools are public schools, normal-school graduates were shut out from high-school positions; therefore, many normal schools began to extend their courses to the college standard of four years and to gain degree-conferring power. Several schools succeeding in both these endeavors are now substantially colleges. My sympathies are entirely with this movement

because I do not believe any school can, in two years, train the present high-school product to that degree of efficiency which the public schools demand. It has been urged that four years is too long a time for a girl to give to preparation for teaching when probably she will be captured by Cupid in a few years. The answer to this is twofold: first, the period of preparation is not regarded as too long for those who are to teach in high schools and they do not usually teach for a longer period than do those who teach in the grades; second, if a four-year course in a normal school included in addition to what it now contains domestic science, domestic art, dietetics, and household management that it ought to include as a preparation for teaching, it would be the best home-makers' course ever devised, and would prove a wise investment for society and the individual alike.

Still, whether courses in normal schools be extended or kept as they are, it is recognized that their work is of college grade, that it is vocational, and that an earnest body of men and women are endeavoring to make normal schools more serviceable to society.

But there is another aspect of higher education to which I wish to call your attention. Everyone who has known the facts has been astonished at the increase in the number of students in higher educational institutions in this country in the past twenty-five years. The increase has been greatest in our state universities.

The report of the Carnegie Foundation, 1911, pp. 69–71, shows:

Increase in past decade:

1. In endowed institutions..... 36 per cent
2. In 89 tax-supported institutions ..... 98 per cent
3. In 72 foundation institutions ..... 62 per cent
4. In Germany..... 60 per cent

The end is not yet in sight. The fundamental facts underlying this increase in higher education are increasing wealth and a belief in the value of a college education.

Take any of our Middle Western states for illustration. The college attendance is large and growing year by year. In Minnesota it is above 5,000. In ten years, this attendance will reach 7,500, or possibly 10,000. Now, the fundamental question is: Would it be a wise thing for the state to have so large a number of students in one institution? There is no doubt that it would be advantageous for a state to have 10,000 students in colleges and universities, but should such a crowd be gotten together?

I need not point out the dangers that inhere in any such program, because, from any point of view save that of institutional aggrandizement, they are obvious.

This question being answered in favor of dispersal, the next question is as to the how. Indiana, Iowa, Michigan, and some other states will probably develop two state universities, while Illinois, Missouri, Wisconsin, Minnesota, and others will probably develop but one such school. In these

states in which the agricultural and mechanic arts colleges are combined with the state university, the problem of dispersal will soonest become acute. In some of them it has already reached this stage.

A strong central institution with facilities and men trained to carry on investigations into pressing social and industrial problems is desirable from every point of view. To have two such institutions in a state and each dependent on the legislature is to invite hostility, finesse, and intrigue as well as embittered rivalry. The dispersal can be made to better advantage by having the work of the first two years of the different college courses done at convenient centers in the state. To establish such junior colleges *de novo* would be an enormous expense and beset with many difficulties. To have this work done in the existing state normal schools is a simpler and better solution of the problem.

In the first place, the expense of dispersal is minimized at the start and will increase only as the actual demands for this work increase. The existing plants can be modified to carry on this work much more cheaply than new ones can be built. If the equipment and teaching force are not equal to this additional burden, they can be increased and improved.

In the second place, I fancy that the straightforward scholarship thus demanded will have a much-needed tonic effect on some of the work in some normal schools. Puttering is easy and professional work is prone to run off into discussion and exchange of opinion. A tonic is needed and I believe that the doing of two years of college work will tend to give a tone of scholarship without injury to the fundamental work of the normal school.

Furthermore, such a plan would enable a normal school to put its own teaching in many subjects into direct comparison with the college type of teaching. This would result in a new kind of evidence that would probably lead to improvement either in college teaching or in normal-school teaching.

If we turn to a consideration of the proposed plan of dispersal from the point of view of the individual student, other advantages appear. With smaller classes, more personal attention is the student's gain. Presumably the normal-school teacher's concern is in teaching rather than in exposition. This ought to insure better learning and a more desirable growth in power. It is my firm conviction that if a normal school goes seriously about the matter of teaching the first two years of college work, it can do better teaching than most of our universities do now.

Then, too, there is a greater sense of personal responsibility felt by a student in a class of twenty in college physics or biology or mathematics than would be felt by the same student in a class of three hundred. This sense of personal responsibility is itself an educative force of no mean merit.

Again, in a broad social way, the proposed plan has advantages. It is worth a good deal to put the opportunity for the beginning of a college course within the reach of every boy and girl, and at the same time to have them relatively near home. It brings higher education to the people as

has never been done before. Normal-school students have been noted for their earnestness. This results from their "life-career motive." To have two years of college work done in such an atmosphere is a great social gain. There is no good reason why college work should become a synonym for "club life." Instead it would be distinctly better if it had more hard work about it and less froth and foam.

To this plan there are two objections. The first is that this is not what the normal schools were established to do. This is true, but all institutions are established for service to society, and with the changing needs of society, the concrete service required changes also. It is my judgment that in certain of our Middle Western states now, society can best serve itself by having the state normal schools do the first two years of college work. Normal schools have been peculiar institutions so long that some of them have grown peculiar.

The second objection is that the doing of two years of college work will destroy the spirit of the normal school. I do not believe that the normal-school spirit is so easily destroyed. It might be broadened a bit without injury in most schools and might even, since it is the greater, be made to include the less. Besides, if the signs of the times can be relied upon, college education will soon be vocational again. It seems to me that the normal schools can help these signs come true by undertaking the first two years of college work.

To summarize: I have endeavored to show:

1. That the work of the normal school is substantially a part of higher vocational education.

2. That these schools ought now to help forward the cause of higher education by offering two years of college work.

B. IN THE SPECIAL TRAINING OF TEACHERS FOR THE RURAL SCHOOLS

D. W. HAYES, PRESIDENT OF THE STATE NORMAL SCHOOL, PERU, NEBR.

For centuries the world has been engaged in producing a rural society; but within the brief period of a generation its work is being torn asunder. Almost at one fell swoop of the maelstrom of twentieth-century industrial and social conditions it is succumbing. It is giving way before the onslaught of rural exodus cityward. A glance at statistics reveals the startling magnitude of this shifting of population. In 1850 only 12½ per cent of the people of the United States lived in cities, while today approximately 50 per cent of the population is urban, a gain of 300 per cent in 60 years. The wide extent of this shifting is further illustrated by the fact that in 1850 there were but 85 cities in the United States that had a population of 8,000 or more, while at the present date it is estimated that more than 750 cities have a population in excess of that number, a gain of nearly 800 per cent.

So far, all efforts to stem the tide of migration cityward have proved unavailing. The movement has gone on in spite of the warnings given by the student of social and political economy; in spite of the science of anthropology in its various phases; in spite of the devitalizing influences of the city upon country stock, both physically and morally, which make it impossible for a family to survive more than a few generations after removal to the city. In this respect man exhibits an inability to profit either by the experiences of his race or by his own experiences. He continues to permit the call of the city to tickle his fancies, and he yields to the call as if it were the irresistible siren in the story of olden time.

Students of social science and thoughtful students of education cannot but be alarmed at some of the results that have characterized the changing conditions of the past few decades. They acknowledge with misgivings the changes wrought in home life thru modern invention and present industrial forces. They are fearful lest there be greater losses in the influence wielded by the home and the church, which for centuries have fashioned very largely the social and religious ideals, and to a limited extent the industrial conditions of the age. They are beginning to recognize present tendencies, and the forces that have caused the rural school to fall so far in the rear of twentieth-century progress.

It is doubtful whether any institution of rural life has suffered more during this period of rural transition than has the rural school itself. The commonwealth of Illinois, which today acts as host to the gathering of the National Education Association, a state that ranks high in its agricultural wealth and industrial prosperity, may well serve as a typical illustration. It had in 1909, 106 country schools that enrolled less than 5 pupils; 589 schools that enrolled less than 10 pupils, and 1,460 schools that enrolled less than 15 pupils; while 32 districts had no school at all.

This unparalleled exodus from the country is not due wholly to man's social instincts, not alone to his desire for wealth, nor to the false glamour of the city; but, according to the investigations of the Rural Life Commission appointed by Theodore Roosevelt, to the better school advantages offered in the city. The largest single complaint of the country people made before the commission was concerning the inferiority of the rural schools.

Inasmuch as the present attitude is a result of education, and since a changed attitude is a matter of a different type of education, it is hopeless to assume that country life conditions may be materially improved without better rural schools. Nor can we hope for improved schools as long as there is such dearth of expert teachers in rural communities. The limits of this paper prevent any more than a brief enumeration of a few of the principal causes that contribute to the lack of efficiency of these schools.

The first, and doubtless the most important, is the low standard of qualifications, academic and professional, required of the teacher. Partly

as cause and partly as a result of this low standard, salaries are low, in fact lower than the wages paid the unskilled laborer that digs in the ditch. Meager salaries have compelled the rural school to be the recipient of practically all the inexperienced, the ignorant, and the immature of the teaching fraternity. The rural school has been the dumping-ground for the derelicts and those incapacitated by the raising of standards in the cities. Far be this from an attack on all rural school teachers; for many of them are among the noblest of the profession. This latter class, however, is too frequently attracted by the allurements of the city, and leave all too soon the splendid opportunities for service in the country. Then, too, the person possessing higher qualifications who perchance becomes a rural school teacher, is not usually an exponent of rural life, but rather of city life. He holds out before the boys and girls the ideals of the city; he pictures to them the glitter of its gilt and tinsel; he does nothing positive to make the young man and woman appreciate that the tilling of the soil to make it bring forth its products for supplying the needs of earth's teeming millions is one of the noblest callings. Neither does he seek to engender within them a serious contemplation of the country as a factor for bringing them into closer touch with the life of the great First Cause.

Added to the problem of the rural school is the prevalence of inexpertness of supervision of these schools. This inexpertness is not due wholly to a lack of qualification of the supervisor, nor to the fact that his office is, as a rule, a political one; but more often to the large area of the unit of supervision. The supervisor finds it impossible to make more than one or two brief calls annually in many of the districts in which large areas are under his jurisdiction. In my own state we have a number of counties larger than the state of Rhode Island, and one in particular with an area equal to the whole state of Connecticut, with Rhode Island thrown in. This vast empire is under the supervision of one person who is expected to do her work thoroly, both clerical and administrative, with not so much as an office assistant.

Our normal schools, tho boasting that their function is the preparation of teachers for the elementary schools, always make the boast with the mental reservation to interpret the elementary school as embracing the village and city schools only, so far as their own products are concerned. Thus my own school, tho one of the oldest in the country, situated in a wealthy agricultural community, does not succeed in placing its graduates in the rural schools. Out of 173 graduates in 1911, 39 secured positions in city high schools, 127 in the grades of town schools, 5 remained in the normal for postgraduate work, and 2 took rural school positions. It is frankly admitted that any system which falls so far short of reaching its constituency, which fails to satisfy even 5 per cent of its patrons, is a failure.

The greatest single need of country life today is more expert teaching.

It needs teachers who understand rural life as it is, teachers who have high ideals of its possibilities, teachers who can go forth into the existing schools and by vitalized teaching and tactful leadership convert the schools into living centers for the education of child and adult. The teacher must be in sympathy with rural life improvement. She must have a broad view of the entire field, social, industrial, and educational. It is a mistake to think the high-school graduate who has been reared in town is qualified to assume leadership in a rural community, of whose customs, habits of living, traditions, and ideals she is wholly ignorant.

This is a day of experts, a day of extremely minute division of labor. The problems of the country are so different from the problems of the city that the same training that will qualify the teacher to take charge of a graded school room under an expert supervisor will not necessarily fit her for a rural school position. The teacher of the rural school assumes a responsibility far out of proportion to what we have been willing to concede; too long have the normal schools been deluded by the belief that no special preparation was necessary for the rural teacher; too long have school authorities been willing that young men and women, often mere boys and girls, as soon as they were able to pass the most elementary examination, and without a vestige of professional training, should assume the rôle of teacher in the district school.

The chief objection raised by the normal schools to providing special training for the rural teacher is that we should not be able to supply more than a small proportion of the demands. It is urged that consolidation of rural districts will solve the problem, that it is the panacea for all the rural school ills. Permit me to answer that I believe in consolidation and centralization. I would not detract from the desirability of urging it in every township in the country; but as yet only a small area of the country has established the system of consolidation, and for many years to come the 12,000,000 boys and girls now on the farm will be dependent upon the individual small district for their education, and not to exceed 5 per cent of all this number will ever receive any further formal education than that received in the country school. Shall the normal schools refuse to attempt to meet the problem, simply because of its magnitude? Shrinking from the problem for this reason alone is unworthy the dignity of a normal school.

Again, it is urged that the schools of town and city consume all our product. Too long have we permitted the policies of normal schools to be shaped by the demands of the city. Too long have we vied with the universities in our efforts to meet the continually advancing standards of the high-school teacher, standards thrust upon the high school by its efforts to meet the requirements of the universities thru their present systems of inspection and accreditment. I would not discourage this advancement of standards, indeed it is greatly to be desired; but it is

inconsistent to sanction any lower standard of qualification for the teacher who has charge of the elementary school in the country than the one who teaches the elementary school in the city. It is illogical to assume that two years' preparation beyond the elementary schools is sufficient training to qualify the teacher of the boy in the country schools, and then demand six years' preparation of the teacher in the graded school. It is just as unreasonable to assume that two years' training will make a teacher good enough to take the boy thru the eighth grade, but demand that she add six more years to her academic and professional equipment before she can teach him in the ninth grade.

It is admittedly true that the country boy is a little nearer nature, that he is, perchance, less artificial, that he possesses greater ingenuity of adaptation than his city cousin, and is therefore more educable. Still, this should not be an argument against his receiving the same opportunities for learning the processes of adjustment that will make him most serviceable to his society, in his environment. If in furnishing him with these opportunities we are compelled to raise salaries of the rural teacher to double the amount she is now receiving, let us not complain. Surely a nation that spends six times as much annually for intoxicating liquors and tobacco as it does for education will find the additional investment in higher salaries not a burden, but an investment well worth while. In times past very little effort has been put forth having in mind the improvement of rural schools. The National Bureau of Education, by the admission of the present commissioner of education, has done less for the rural school children than for any other department of education, notwithstanding there are more rural children of school age in the United States than town children.

Present tendencies, fortunately, show a remarkable awakening in public appreciation of the rural problem. The national Congress and many state legislatures have made appropriations for rural life commissions. Within the past eight months there has been created a rural school division in the National Bureau of Education. Rural life conferences are being held in several of the states, particularly in connection with normal-school extension work. There are teachers' institutes, country school associations, summer normals, county training high schools, normal training in high schools, junior normals, traveling rural libraries, and additional state normals, all having in mind to a greater or less degree the betterment of country life.

In a somewhat limited investigation conducted by the writer among the normal schools of the Mississippi Valley, covering fifty of the typical schools, it was very encouraging to note the awakening normal-school conscience relative to its obligation to the rural schools. Reports received from forty-two of these schools, while not recording much of actual accom-

plishment, contain sentiments redolent with hope and enthusiasm for what is anticipated in this field in the near future.

To the question, "Do you have a course of study for the special preparation of rural teachers?" 27 answered "yes"; two had just been authorized to prepare courses; two schools were not yet opened but would have such a course; one prepares supervisors only; while 10 answered "no."

"What was the date of its inauguration?" To this, all but one reported its inauguration between 1907 and 1912 inclusive. Three did not give the date. It is interesting to note that 17 of these schools established rural-school courses within the past two years.

Twenty of these schools make the completion of the eighth grade the minimum qualification for entrance, three the tenth grade, four the eleventh grade, one the twelfth grade, and one makes age the basis of entrance requirement.

The length of the courses above the eighth-grade entrance requirement is as follows: three schools 42 weeks, thirteen schools 2 years, three schools 80 weeks, one 84 weeks, one 3 years, one 6 years, one 160 weeks, while one does not have a separate course but has the same requirements as in the regular courses. In one school making the entrance requirement completion of the tenth grade, one year is required to complete the rural course, and in another 78 weeks. The four schools requiring completion of the eleventh grade as the entrance requirement offer a course one year in length.

Practice teaching: Out of thirty-two schools that either have in active operation country-school courses, or will have within a year, thirteen do not provide for any practice teaching whatever. One is planning to require it, seven state that it is required but do not give the length of time, two require 12 weeks, two 24 weeks, one a half-year, one two terms, one two credits, one very little, and one, one year.

Other professional work required: Twenty-one schools report some form of professional work offered, six of these offering elementary psychology. Other professional work is required, as elements of pedagogy, rural school management, observation, and rural school methods.

It is worthy of note that a few of the normal schools are already going further in their efforts to bring the rural communities to a higher social plane to assist them to a keener appreciation of their opportunities and possibilities. The ideals of the various normal schools find expression in various forms; in rural school conferences, in lectures by faculty members at rural gatherings, in extension courses, in short courses in agriculture and domestic science, in model rural rooms and buildings, in organization of country life clubs, in campaigns for consolidation of schools, and promotion of industrial education thru boys' and girls' clubs and contests.

The agitation in recent years, this quickening of the normal-school

conscience relative to its obligation to the 12,000,000 country boys and girls, augurs well for the future. Who shall say that it is not, after all, the destiny of the normal school to enter into the breach made by twentieth-century social standards and industrial influences in rural life progress, and by its direction and wise leadership enable the rural community to come into its own. Surely the problem is worthy of no less a champion than the American normal school.

C. *IN RELATING THEORY AND PRACTICE TEACHING SO AS TO SECURE TEACHING EFFICIENCY*

ALFRED C. THOMPSON, PRINCIPAL OF STATE NORMAL AND TRAINING SCHOOL, BROCKPORT, N.Y.

The greatest problem in education is that of the training of teachers. Unfortunately the teaching process does not come by inspiration as might be inferred from the old proverb that the teacher is born, not made. This proverb like many others is misleading and untrue. Perhaps some careless printer by changing a single word is guilty of leading astray many generations under the inspiration of a wrong proverb, the correct version of which is that the teacher is born, not paid.

At any rate, true it is that the teacher is made, not born. It is mighty hard to be born a teacher, and few are so born. If this were not so the teacher problem would be comparatively easy. The superintendent would merely become a Jason in quest of the golden fleece. Undoubtedly, inherent attributes are a very powerful factor in determining the quality of a teacher, a doctor, or a lawyer, but none of these can give a high quality of service in his particular calling without a very special and technical training.

The training of teachers is a much greater problem than the training for any other calling, since the true teaching profession embraces all others, as it comes in contact with and develops all sides of life. So deep and intricate is this problem that it is almost beyond the comprehension of the finite mind. Proof of this is that it is not at all uncommon to hear people of good education and ability, who have never breathed the air of the schoolroom, assert that while they do not understand fully many things, they do know about school work. In the world's history there have been so few really great teachers that we can easily remember and call their names.

Since the birth of the human race in Asia, the march of progress has followed the course of the sun westward thru Europe to America. While circling the globe many great problems have been settled. The problem of making teachers still awaits its final solution. The oriental countries, the ancient classical nations, the great educators of the Renaissance, and the scholars of our own period have not settled it. This question has been considered for countless ages. I shall not try to settle it offhand. Experi-

ence has taught me some things in this connection. My part will be confined to a discussion of these.

There is a wide gulf between theory and practice in teaching. The ignorant and destructive criticism of present methods, so prevalent in current literature by a few educational sciolists whose experience in the teaching of children is limited to theorizing, will not hasten the settlement of this matter.

A large part of the theory taught in our normal schools emanates from the sanctums of college presidents or professors whose chief experience in elementary education has come from seeing children pass by their sanctum windows on their way to or from school. Many a young teacher loses his faith in his normal school, if not in humanity in general, when he discovers that the beautiful theories doped out in his methods classes fail to work when applied to real flesh and blood.

The point I wish to emphasize is that we must first make sure of the theories we teach. Theorizing from any source can be of little service without demonstration. It will pay to scrutinize, with greatest care the theories of destructive critics, for the keenest critic of him who can is he who can't. Let us adopt the theories of those who have done something to show how to determine a child's highest possibilities and how he may attain them.

It is a matter of wonder that so many of our normal graduates succeed as well as they do when we consider how little application the theory we teach has to actual school practice. Almost all of our theory says that the real problem in school is the child. The neophyte, when he begins his first school-teaching, quickly finds out that the real problem is not the child but the parent. When the young teacher makes this discovery, if he doesn't regard all of his normal-school theory teaching as a hoax, he will at least feel that a most important part of his preparation has been neglected.

Some years ago when I was a school superintendent I made a visit to a certain normal school, seeking teachers for my schools. This normal school had secured for a lecture course of a week a gentleman who was expounding what was to me at that time a new theory of education. I speak of it here since the normal school in question made this new theory of education the keynote of all of its instruction during that and the following year, and it will illustrate how powerful an influence the theory teaching may have in the making or spoiling of teachers.

The lecturer's theme was that a child should never be compelled to do anything that he did not wish to do. He proved beyond a question that if a child be permitted to follow his natural bent without let or hindrance from the teacher he would acquire an irresistible power to do things. I remember that he clinched his argument with the analogy that a physical force unimpeded would acquire a tremendous momentum. His lecture abounded in such expressions as self-realization, spontaneity, self-activity,

initial development, etc. In a nutshell his philosophy was that a child would most quickly attain his highest possibilities by educating him along the line of least resistance.

Practically every teacher that went out under the inspiration of this dangerous theory failed. It did not take long to show that non-interference with the spontaneous activities of children resulted in anarchy. Nature does not give the average child spontaneous impulses that will lead him to learn to cipher and spell. Any system that contemplates the acquiring of useful information incidentally will result in its being acquired accidentally, if at all.

Nothing in this world worth while can be acquired without patient and persistent effort, and to teach a child anything different is wicked. Every man who has succeeded in any worthy undertaking has done so by means of sacrifice and struggle and usually by doing things that he did not want to do.

I do not wish to be understood as advocating the old rigid educational system of inventing artificial hardships, but I do believe that no effective substitute has been found for drill and formal teaching, and that it behooves us normal people to examine critically any theories to the contrary. We must not despise theory because it is the guide to practice, but practice must ratify theory. Theory should be substantiated by a good body of facts before we should allow it to influence our practice. There is always a great temptation to make our normal schools practice schools instead of model schools.

I hope I have succeeded in giving the impression that I would not have many theories tried out in our normal schools. I should like to have in the faculty a deep love of knowledge, and a strong, quick feeling for childhood. The faculty should be alert to new ideas, but not too easily influenced by them. The best ideas upon education should be expertly carried out in the model school, for all of the work of the normal school should be made to center here. The normal students should have opportunity to observe the work of the specialists and should later serve an apprenticeship under the guidance of the expert.

I would have normal students given adequate opportunity to study the natural interests and instincts of children and the natural order of their development. No teacher can become an original source of directive energy without the knowledge that such a study gives. I should try to have it deeply impressed that they are preparing themselves to teach children rather than subjects.

Of course very special attention must be given to both general and special methods. Among normal-school teachers I have heard considerable discussion as to what should be taught under the head of methods. Some maintain that subject-matter does not properly belong to the methods teacher. It is my opinion that the aim in methods teaching is threefold:

to give an expert knowledge of the child, an expert knowledge of the subject, and an expert knowledge of the most economical way of bringing the child and the subject together.

In practice the methods teacher should not devote his whole time to teaching ways and means of bringing pupil and subject together. The teacher of geography methods will discover that his students have not a sufficient knowledge of geography to inspire pupils with a love for that subject. This will probably prove true in connection with any other subject. He will find it very profitable in his methods class to take a somewhat comprehensive review of the subject, teaching some portions intensively as types which the normal students will use in the model school, the methods teacher using care to select such types as will adapt themselves best to the needs of the pupils in the model school. The methods teacher and the critic teacher should be in closest touch and sympathy, and the teaching of the normal student, as indicated before, should be the basis of conference between the critic and methods teacher and of sympathetic, individual, constructive criticism, thus helping the pupil-teacher to grow.

In this process of making teachers the greatest care should be exercised not to give the normal student the impression that arithmetic, geography, etc., point the way to future salvation in teaching, so much as a knowledge of, and sympathy with, the child. Unfortunately, we have not yet been able to devise examinations which put the emphasis in the right place. While the students should not be allowed to go from the normal school until they have a sufficient knowledge content to form a proper basis for future study and growth, nevertheless, the child should constitute a large part of the course.

In closing, I should like to make one or two very definite suggestions. The field of the normal school is very broad, and like all Gaul is divided into three parts. The first division comes in the model school at the end of the sixth grade. Here the problem has to do with pre-adolescent children. The next six grades constitute the second division. In these grades are adolescents. The professional department is composed mostly of those who have reached the age of nubility.

The kind of education adapted to these divisions is decidedly different in each case. Time will not permit a full discussion of this, but it is very evident to every teacher that both subject-matter and method must be of a different character to be adapted to the natural interests, instincts, and development of these three classes.

Any teacher who attempts to formulate and teach general theories of education will probably do more harm than good. All theory or methods teaching should be aimed definitely and specifically at one of the divisions before mentioned, and it is certain that such theory or methods teaching would be much more to the point if the teacher had an expert knowledge himself of the individuals of the group in question acquired by actual teaching contact.

The best results can never be obtained unless there is a unity of purpose and the fullest understanding between the methods teacher and the critic. Each step should be carefully considered by these two before the pupil-teacher tries his hand in the schoolroom, then together they should test and weigh results and thus gain knowledge and experience for the next step. This, in my opinion, is the best method of relating theory and practice teaching, so as to secure teaching efficiency.

D. IN TRAINING TEACHERS FOR THE PUBLIC WELFARE—CIVIC, SOCIAL, MORAL, RELIGIOUS

W. S. DEARMONT, PRESIDENT OF STATE NORMAL SCHOOL, CAPE GIRARDEAU, MO.

The need of the hour is broadly educated leaders. Leadership in this country has been too largely in the hands of men of narrow and limited education and vision. These men have sought direct and immediate results. In the sharp conflict of life thay have learned to win the mastery by fair means or foul. They have learned to love power for its own sake; their every action has, too often, been shaped by the love of gain and the lust for power. These men, holding in large measure the industrial and civic leadership of this country, have been devoid of broad humanitarian principles; without civic and social ideals; without high moral and religious principles.

These men of limited vision in their mad race for wealth and lust for power have made the rapid development of this country the wonder of the world. This country has grown in wealth beyond the wildest dreams of avarice. But they have achieved these results at the expense of a fearful waste of our natural resources and at a more fearful waste of human health, human life, and human morals.

We must have educated men, men of vision, men of broad sympathies and lofty ideals, for leaders; we must have men educated along broad lines. This education must include experience and close touch with all phases of life. They must be so educated that they will place their obligations to God and their fellow-men above any other consideration in life. They must be educated to be true leaders of the people, not their masters and exploiters; men who love righteousness, justice, and mercy; men who have faith in the possibilities of the race—faith in the possibility of a high plane of living for the whole people.

Such men never come to leadership among an ignorant people devoid of civic and social pride, and moral and religious ideals. If a triumphant democracy is to rule the destinies of this continent in the ages to come, it must be an educated democracy—a democracy alive to its civic duties, full of social efficiency, and with a high sense of its moral and religious

responsibilities. In such a democracy great men and true will come to leadership; will rise to lead the people to higher conceptions of life; to a higher degree of social efficiency; to loftier moral and religious ideals.

The foregoing statement of the situation makes clear the function of the normal school in relation to public welfare. The teacher is to have a larger share in making the character of the great American democracy; and the teachers of this country will, in the main, be trained in the normal schools. The responsibility of the normal schools for the public welfare is, therefore, a large one. It calls for men at the head of them and in their faculties who are themselves leaders. The men of the normal-school faculties must have the most thoro training for the special lines in which they are to teach. They must have had a broad and varied experience in teaching and they must be full of the teaching spirit. The men at the head of these schools and the men of their faculties must live ever in close and sympathetic touch with the people among whom they labor.

The work done in the normal schools must touch every phase of the life about them and it must prepare its teachers to be in sympathetic touch with life.

If the normal schools are to meet their responsibilities in training teachers for the public welfare, they must distinctly recognize that the end of their work is the public welfare. They must clearly recognize that the end of their work is not to train teachers to teach arithmetic, grammar, history, geography, and other branches of knowledge; that the end of their work is not to train teachers for the primary grades, the grammar grades, the high school; for the rural schools or for the city schools; that the end of their work is not to train teachers to make a living and to become successful and influential members of society; that the end of their work is not to increase their attendance and to extend the influence and power of the school as far as possible. Any one of these aims is important in itself and is worthy of serious consideration and earnest effort; and certainly taken collectively they are of the highest importance. It is undoubtedly true, too, that thru doing well these several minor things, the larger and ultimate end of training teachers for the public welfare is to be attained. But if we would reach the ultimate goal of all our efforts we must keep the higher end constantly in view. It is probably true that most of the normal schools are failing to keep distinctly in view the fact that the end of all our work is the public welfare. We catch imperfect glimpses of the end; but, for the most part, we find ourselves immersed in a multitude of details and in a ceaseless round of endless routine that obscures the view of the real end. We must keep the end more clearly in view if we would train teachers for effective service in promoting the public welfare, civic, social, moral, and religious. If this great end is to be an inspiration to the normal-school faculties and give them power to inspire and direct the lives of their students; if it is to be a moving power in calling forth the energies of their

students and directing them to the highest ends, it must be kept constantly and immediately in view.

Keeping ever distinctly in view the end of training for the public welfare, the normal school must develop in its students a high sense of civic responsibility. This sense of civic responsibility must be developed in part by giving in the normal school the most careful training for citizenship. The study of history, civics, economics, and social life problems should form an important part of the training of teachers in the normal schools. The study of these subjects should be made very practical and should be made to touch actual life as closely as possible. Teachers should be trained to be students of civic, social, and economic questions in their local communities. It is not uncommon to find a school superintendent who is a capable and efficient man in most respects, who does not know the assessed taxable value of the property in his school district. He will undertake to discuss the possibility of making some improvements in the schools of his district involving an increased expenditure for maintaining the schools without knowing the assessed value of his school district. This is but a fair sample of the lack of knowledge on the part of teachers and other citizens in relation to the most ordinary civic affairs. Every school superintendent and, indeed, every teacher should be an expert in his knowledge of taxation in all matters pertaining to the support of the public schools. Teachers in the normal schools should be trained to be intelligent students of all civic and social problems confronting the community, the state, and the entire country. Civics should not be studied alone or mainly from the standpoint of gaining a historical knowledge of the development of our government. The history of the development of our government should certainly be studied. But the actual problems of the present should be studied constantly. Is the city considering the problem of the water supply and the lighting of the city? Whether it will be best to renew the franchise of a corporation which is asking the renewal of its franchise to furnish water and light, or to purchase or install a municipal water and light plant should be studied by the classes in civics and economics. Municipal responsibility should be studied in street improvements; in caring for the public health; in keeping the peace and protecting life and property; in cleaning and beautifying the city; in providing schools, a public library, playgrounds, and parks; in guarding the public morals of the people thru regulating and controlling to an extent places of public amusement and recreation. The responsibility of the city in controlling public service corporations; in protecting and promoting the business of the community by securing for manufacturers and merchants the best transportation facilities at the most reasonable rates; the care of the poor and the helpless members of the community; the care of the insane and the sick; these and other questions of civic and social concern should constitute a large part of the subjects for study in the classes in civics, economics, and sociology.

Problems actually confronting the state should be studied in the same way. The relation of the state to the public-school system should be thoroly studied. The state in the management of penal reformatory and eleemosynary institutions; in the construction of good roads; in the regulation and control of public service corporations; in the regulation of transportation and traveling rates; in the protection of the public thru the inspection and control of the banks, building and loan companies, trust companies, the mines, the factories; these and many other problems confronting the state government should be studied.

In the study of economics and sociology the history of the development of industries and trade and the history of the development of civilization and the institutions of society should not constitute the whole study of these subjects; the historical view of these subjects and the broad theoretical view of these subjects should not constitute the work done in them in the normal schools. The historical and the larger theoretical view of these subjects should be studied in connection with the most careful study and examination into economic and social conditions immediately surrounding the student. They should be studied along with a careful study of economic and social problems that confront the immediate community and the country generally. The actual living conditions surrounding the students should be studied and interpreted to some extent in the light of history and of the larger theoretical consideration of economics and sociology. Economics and sociology must not be made purely academic subjects of study; they must not be studied for their broad informational and cultural value; the study of them must not be separated from actual life and living conditions. Normal students should go into the factories and shops and stores; they should go where men are building and constructing; they should go among the men who are working on the streets, in ditches, and in the fields. They should study the conditions under which men work; they should study the conditions under which they live in their homes; they should study to know what is their attitude toward life and the society in which they live. Economic and social life problems must have a permanent place in the work of normal-school students if they are to be prepared as teachers to make the lives of the pupils that they teach in the public schools fit into the life of the world outside the school.

But in training teachers for the public welfare the normal school must prepare them to wield a strong moral and religious influence in the schoolroom. The first and most potent influence in molding and developing the moral and religious character of the teachers who are trained in the normal school is the personal power and influence of the men and women who make up the normal-school faculties. If the normal schools are to wield a strong moral and religious influence thru the teachers they train, their faculties must be made up of men selected for their strength and their purity of character. Teachers everywhere should be strong in this respect;

but it is of the utmost importance that these high moral and religious qualities shall be possessed by the men and women in the normal-school faculties; for the normal schools more than any other schools are training the teachers who in turn will mold the character of the millions of children in the public schools; and of nearly equal importance is the fact that they are training more of the future mothers of the better educated class of people than any other schools are training. The men and the women in the normal-school faculties must, therefore, be men and women of the strongest and most earnest Christian character. And they must be men and women of wide and varied experience and broad and tender sympathies. They must exemplify in their lives the purest and best moral and religious qualities; and at the same time they should be broadly sane and human in their lives and in their sympathies.

Next in importance in training teachers in the normal school for the public welfare, morally and religiously, is the training that comes from the study of history, civics, economics, and sociology, and that comes from the life these future teachers live in the normal schools. Right sympathies should be constantly aroused and right attitudes should be constantly brought about by the study of the duties and responsibilities of citizenship; by the study of economic conditions, and the influence of economic conditions upon the lives of the people; and by the study of the social conditions, needs, and possibilities of the people. And right sympathies and right attitudes should find abundant opportunities for expression in the activities of student life. The student activities should be planned and regulated with this end in view. These activities should be planned and encouraged with a view to giving a healthy outlet and a healthy expression to the emotions of the whole student body. They should be planned and regulated with a distinct purpose to give an abundance of healthy and right expression and activity. Right moral character is developed thru right moral action. In the daily activities of the school right moral character must be built up by right thinking, feeling, and acting. Right attitudes and right conduct in all the relations of school life must prevail; honesty and fair play and manly vigor on the athletic fields; courtesy, considerateness, and a spirit of helpfulness and of willingness to co-operate with others for the common good in all student organizations; and a recognition by the student body of the importance of the great work for which they are preparing themselves and a correspondingly earnest application to gaining the knowledge and experience that are necessary to make them masters in their profession. Such living and acting under the stimulating influence and direction of strong men and women cannot fail to bring the right moral development, especially if the proper religious influences surround the students.

Training for efficiency in religious work presents peculiar difficulties in all public schools on account of the religious intolerance that still prevails among our people. The time should come when this religious intolerance

which is such a hindrance to the highest religious welfare of our people should give way to a better religious spirit; but in the meantime the normal schools must not neglect and especially must they not be indifferent to the religious education of their students. They must recognize the supreme importance of religious training and living. Thru the religious character of the men and women in their faculties they must exert a strong religious influence upon the lives of their students. The lives of the men and women of the normal-school faculties should speak in no uncertain tones on this point, but should be strong and positive. No moral character that is based upon a colorless æstheticism can take the place of the virile moral character that has its foundation and its abiding strength in the Christian religion. This fact should have distinct recognition in the normal schools.

The normal schools should promote the religious education of their students by encouraging student religious organizations, by encouraging the students to be active religious workers in their several churches; by the work of the members of their faculties in student organizations; and by the work of the members of their faculties in the churches. The normal-school faculties can see that the religious education of their students is not neglected if they determine to do it and this can be done without the violation of our Constitution and laws in the letter or in the spirit; and without denying any citizen his religious freedom or his religious rights in any respect.

The only hope of the American democracy lies in education; its only hope lies in the public schools; its only hope lies in a better knowledge on the part of the whole people of their civic and social rights and duties; of their moral and religious responsibilities. The only efficient agency for the education of the people who constitute the American democracy is the public schools; and the public schools can prove an efficient agent in the education of the people only thru the work of the normal schools in giving the teachers who are to do the work in these schools a real training for the public welfare. The only hope of the American democracy lies in the education of the whole people in the public schools; and that hope can be realized only by making the education given in the public schools an education for civic and social and economic efficiency; and an education that will develop a high sense of moral and religious responsibility. Training teachers for the public welfare in the normal schools means training for giving such an education as I have described. It must be an education of the American democracy that will teach them that the doctrine of the survival of the fittest has no application in the lives of human beings; or if it has application the definition of the fit must not be the brutally selfish. It must be an education that will fill men with an abiding faith in the possibility of human achievement and human destiny; a faith in the possibilities of a high plane of living for the whole people. It must be an education that will inspire in the people a high idealism and will make

them demand and have as their leaders men of broad vision and of a high idealism. But it must be an education that will make the people and their leaders not mere visionaries—not impractical idealists. It must be an education that will give the people a practical training for economic efficiency as well as for civic and social efficiency. It must be an education that will free the people from actual and threatened industrial slavery; and at the same time it must be an education that will vastly increase their industrial efficiency and industrial productiveness.

The work of the public schools which is to constitute the only hope of the American democracy must be as wide in its scope as the limits set for it by the men of broadest vision; perhaps its scope will extend beyond the limits of our present vision. It must provide for the education of the whole man; it must have a concern for the physical welfare of children as well as for their intellectual and moral welfare; it must provide the training of the physically deficient, and the mentally deficient, and the morally deficient. The dictates of prudence as well as of human love demand this; the protection of society as well as the welfare of suffering human beings demands it. The schools must educate for moral efficiency as well as for economic efficiency; they must educate men to use their leisure wisely as well as to be industrially efficient and productive; they must educate them to live well in the hours of their freedom from toil in the industrial fields. The work of the public schools must not be bounded by any limits of class or age. All classes must be reached by the work of the public schools. The parents whose education has been neglected must find in the public schools the means of extending their education; the work of the schools must touch the home life of the people; it must touch their industrial life; it must touch their recreations; the schools must touch and fuse into one the whole social life of the people. There must be no gaps left between the life of the school and of home and society.

Training teachers for the public welfare in the normal schools means the education of the teachers who can make the American public school fill such a place in the American democracy; who can thru their work in the public school make an American democracy a reality.

SECURING AND MAINTAINING EFFICIENCY IN THE TEACHING FORCE OF NORMAL SCHOOLS

J. G. CRABBE, PRESIDENT OF STATE NORMAL SCHOOL, RICHMOND, KY.

What shall we do in order to secure efficiency in our teaching force and by what régime shall efficiency be maintained? I use Dr. Eliot's definition of efficiency to mean "effective power for work and service." No new scheme of normal-school administration is here offered, no fad to exhibit, no hobby to ride. At a meeting of the National Education

Association, discussing the "Growth of Teachers in Service," Superintendent Maxwell said:

> The final solution must come thru the principal of the school. I came to this meeting to get light upon the problem, "How we can make good principals out of poor ones?" This hope has not been fulfilled.

There was much sound philosophy in Dr. Maxwell's remarks. Today the problem of efficiency in the teaching force of every school is largely a problem of administration. My theme, then, is a double one and I state it thus baldly: How can we make efficient presidents and principals of normal schools out of indifferent ones? and how can presidents and principals make efficient teachers out of ordinary ones? My twofold theme pertinently addresses itself to the two prerequisites to securing and maintaining efficiency, the president and the teacher, for without the cordial co-operation of the faithful teacher there can be no hope of efficiency. Seek first a live president, then a live teacher, and all necessary other things will be added.

I. To develop effective power for work and service in the teaching force—efficiency—the president must set up his standards in the midst of his teachers. This is big with importance. Some normal schools have set up no real standards; too many have tacitly assumed a mean one. Other things being equal, the school's efficiency is directly proportionate to the standards set up.

The first standard to be lifted up is the president's ideal normal school, what a normal school means to him, what its mission, what the goal as he sees them. The president needs to see the end of normal training from the beginning. He needs to see in prospect the child yonder, in home, in school, on playground, in the market place, the forum, the church, the state—the finished product of home and community and school. He must see the child yonder and he must be able to make the teacher see this same vision. He must sympathize with normal-school aims, normal-school doctrines, normal-school training, normal-school people—not passively, but he must be all aflame with genuine enthusiasm that will beget love for teacher-training and child-training in the hearts of every normal instructor. His ideal normal school must be a training school for teachers —not a quasi-college or university, that merely apes college curricula, manners, and methods.

A normal-school president once said:

> If you want to do anything for the normal schools, help them to get out of the blind alley in which they find themselves.

God forbid! Such men have no true conception of the mission of the normal school and should be attached to some of the mediæval educational institutions still existing in the twentieth century. If the normal schools merely equipped teachers in the common school and academic subjects,

truly we would be in a blind alley, journeying out of the main educational current, getting nowhere in particular. But these schools are especially designed to prepare teachers, and the states have left it to the state normal schools to establish within their borders an educational clinic—the training department. This training department is the heart of the state normals, and it is this that makes them distinctive. The ideal normal school says with clear emphasis, "This one thing I do—I train teachers for all schools."

Why not have blazoned on our standard the creed of this department promulgated in 1908, which briefly declares for:

High-school graduation for admission to normal schools; the training of teachers by the normal school for both elementary and secondary schools, two years' training for the elementary course, four for the secondary course; the establishment of departments of special research; courses of training for educational leadership; opposition to the domination of the colleges in making the secondary courses of study preparatory to college; and a broadening of the normal-school curriculum to meet the needs of the broadening curriculum of the public schools.

Or I would sound out these eternal basic principles of truth and training for teachers as enunciated and taught by the State Normal in its creed:

1. I believe in the three R's—Reading, Writing, Arithmetic—as the foundation stones of the teacher's training; he that climbeth up some other way, the same is a pilferer.

2. I believe in the three M's—Matter, Mind, Method—as the sanctum of the teacher's training; he that entereth in, shall go in and out and find pasture.

3. I believe in the Pauline trinity, of which the Book declares, "Now abideth Faith, Hope, Love, these three; but the greatest of these is Love."

4. I believe in the three H's, the Normal Trinity, of which the "Book of Normal" declares, "Now abideth Hand, Head, Heart, these three; but the greatest of these is Heart." Heart is the *sanctum sanctorum* of the teacher's training; he that entereth in, does so that his pupils might have life, and that they might have it more abundantly.

But the one standard set up is not enough. Along with the ideal school, let us lift up another standard, the president's ideal normal-school teacher; what a teacher means to him, what it takes to make a teacher, what it takes to be a teacher, what a teacher thinks, does, feels, hopes, believes, sees, as he sees these things. "The faculty is the soul of the institution," says the report of the Committee on Normal Schools in 1899, a document which has come to be an educational classic. The faculty should be men and women of physical efficiency. No argument is required. In passing, it is interesting to note that, within certain limits, as the teacher's salary becomes smaller, physical efficiency is decreased; as the salary becomes still smaller, mental efficiency is decreased; and finally, as the salary becomes pitifully smaller, moral efficiency is decreased. As a matter of fact, the teacher's income has much to do with maintaining efficiency.

Today as in the days of Page and Hinsdale, and White and Harris, the first essential qualification of the teacher is scholarship—broad, comprehensive, accurate. All professional training is, perforce, based on sound scholarship, special training for his own department and professional

training. College degrees may be good, but mere degrees mean but little to the normal-school president. The young man just "doctored" by the college, without pedagogical training, who thinks that anyone who knows a subject can teach it, and then tries to teach it just as his college professor taught it to him, soon finds to his sorrow that there's more than knowledge in the teacher's tool-chest. The college professor may or may not teach pedagogically, tho he ordinarily does not. The normal instructor must teach pedagogically. Students may have had the usual high-school subjects but the normal instructor teaches them in a new normal way; in the high school the subject was the student's central thought, in the normal school the end in view is the pedagogical presentation of the subject. The teacher must practice what he preaches, must teach by the methods which he wants his students afterward to put into execution, for students, by and by, will teach as they have been taught by their former teachers.

Because of this, primarily, the normal instructor must believe in, and be a part of, the training department. He must see the child yonder, he must know the problems of the public schools. It is therefore necessary for him to visit the classes in the training department, observe the work of the training teachers, and become familiar with the student-teachers' daily activities. He should know how the lesson-plans are worked out and developed, what difficulties arise and how they are conquered, and how failures are met. He does not visit the training department simply to criticize, but to put his heart up against the heart of the school and count its throbbing pulses, to enter fully into the heart-life of the school, to correlate his work with that of other departments, to find inspiration, to find the child—truth. Only thus can he teach best as a normal instructor if the normal school is to be a unit.

Above all else, the teachers of the school must be men and women of character; and the state normal must be a character-building power. Even if a teacher be thoroly trained on the physical side and tho he be highly trained intellectually—the side of concentration and mental grasp—yet he is but a pigmy in the line of real efficiency unless he be dominated by a single purpose, a great ideal for which he works and which he serves with enthusiasm and devotion. He must know that that only is the best education which implants in the breast of a man a knowledge of soul development and soul possibilities; which conveys in some mysterious manner to his inner self the conception of individual personal worth, out of which is to grow to a glorious maturity the fruits of heart culture—virtue, honor, purity of life, character—and because of which he is to receive a healthy inspiration to noble living and to holy ambition, to higher attainments and unselfish manhood. This education will enable a man not only "to get a living," but *to live* in the completest sense, and the teacher who has been faithful in these lines will some day have his pupils rise up and call him blessed. For, while they will go out from school and forget much of

Latin and Greek and French and German and mathematics and science, they will forever hold to their manhood and womanhood, built up, as it has been, by the daily round of school duty, and strengthened by the silent influence of a true teacher's right life and correct example.

II. To develop effective power for work and service in the teaching force—efficiency—the president must lead his teachers to efficiency.

Looking toward maintaining efficiency, the president has already set up his standards, his ideals: (1) his conception of a great normal school, and (2) his conception of a real teacher. Now he must lead, that the faculty may become efficient and be kept efficient, that the school may become efficient and be kept efficient. It is trite to say that the president must be a leader, yet he does not always lead. Of course, he keeps office hours, presides over the assembly of the student body and at faculty meetings, talks sometimes learnedly, and writes pretty essays and even scholarly disquisitions for the edification of the people, sends out to the teaching force circular letters of counsel and direction, and in many ways points out the way to his teachers—tho he does all this, and speaks with the tongues of men and of angels, and does not lead, he is become as sounding brass and tinkling cymbal. He must be a leader and himself must lead. Efficiency means power, it takes real energy, it takes downright work. A lazy president will never inspire efficiency. His slogan should be, not, "Go forward," but, "Come on, boys."

He may be a leader of educational thought, a philosopher, a historian, a leader of force and power in public assemblies, but more vital than all, he must be a leader in higher things, a leader of heart-power. The state normals stand for real, true training and high ideals, not mud-pie ideals. They stand for broad culture and clean standards. They demand the most wholesome influences and surroundings. Under such environment character is fostered and builded. That character ought to be unqualifiedly Christian. I have no apology to offer—every teacher should be a positive Christian force in the community, and the head of every normal school ought to be a leader of Christian ideals. More serious-minded, purposeful students are attending normal schools in the United States than any other kind of educational institution, and these young men and women ought to be made leaders of social, religious, and community life.

It is to be greatly regretted that certain well-known higher institutions of learning in the United States—some of them state schools—find it wise or necessary to try to discredit the Bible, or to sneer at the teachings of Jesus the Christ. Often the atmosphere seems laden with agnosticism and infidelity. Sometimes the spirit of the school is merely un-Christian—there is no time nor inclination for devotion, no encouragement for religion, for the church, for God, only time for blunt facts, abstruse speculations, "pure science," and doubtful philosophy. Scores of young men and women, scarcely out of their teens, become steeped in Tom Paine and

Voltaire, but seldom are they versed in Newton's laws, the binomial theorem, and their mother-tongue; they become worshipers of the sun, the birds, the brooks, the flowers—living with nature, but finding no God of nature! Soon they forget their reverence for the Sabbath day, the beautiful and tender years of childhood, the memories of Christian father and mother and home, and the little brown church with its ivy-covered belfry, its stained windows, its high pulpit and pews, its quiet, peace, and solemnity, its simple services, its sacred influences—once-blessed home church! Forgotten! because, forsooth, some man who ought to be a leader of men and women neglects the altars of the highest life. It is pitiable for a teacher to tamper with unfaith. Hasten the day when the Bible shall be an open book, when Christian character shall be stressed in every school, and when our higher educational institutions shall have a touch of the "old-time religion."

I do not hurl silly invective against higher criticism and the critical study of religion thru history and scientific research, but you put young men and women in the normal schools to discussing the unknowable and unthinkable and uncertain philosophies of pure reason, thus neglecting the plain pedagogical principles and methods of the elementary school, and the time will come when a lot of normal school presidents will be tried in the eternal burnings.

III. To develop effective power for work and service in the teaching force—efficiency—proper supervision is essential.

Superintendent Pearse says: "Proper supervision is the final and vital thing in securing efficiency." He was thinking of the problem of the city school, but wise supervision is necessary even in the administration of normal-school life. The school machinery must be perfected, a part legitimately to be attended to by the school, the other to be managed by the teacher. There must be system and order in the daily round. School machinery is not the highest concern of the school but nevertheless it is an essential and a prerequisite to all efficiency.

Personal supervision by president, principal, head of department, and supervisor is the all-in-all essential. Criticism is not the thing in supervision, but that the supervisor may see things and know things in a comprehensive way for his own use. Then he can plan for policies and courses of study, and general changes and development. He will find faults here and there and everywhere but these can be corrected without leaving a bit of sting if he is tactful, especially if he is fair in his commendations of worthy work. Judicious approval, well merited, will salve many a hurt. Diplomatically, he can show teachers a better way, a more excellent way, or he can send them to see a better way under other and more excellent teachers. The average teacher—not the superior teacher—has a deal of inertia in his make-up, and it may be necessary for the supervisor to exhibit this fact to such, for the sake of efficiency. The personal touch is the key

note to successful supervision. The mere martinet is valueless as a supervisor, but the man who loves his work, who believes in "his job," who loves his people, and, who, as he goes in and out before them, hopes sincerely to serve and help them—he is the man who has the personal touch to win teachers to himself, to his way of thinking, and because of this mental and moral attitude, they will not only accept but even invite criticism.

IV. To develop effective power for work and service in the teaching force—efficiency—the president must keep infusing new life into the school organization and normal community.

I tread on dangerous ground, but I am of the opinion that change is wise—new plans, new schemes of development, new materials, new organizations of life and growth. I'd have a little change each year merely for variety to awaken dormant forces and I'd do it tho the new were not quite so good as the old. The old becomes monotonous, the treadmill tires, work lags; the new arouses, energizes. Encourage each teacher to find some new truth or newly discovered truth or theory in his own laboratory, or to find a better or simpler way in organizing any body of truth. As the normal instructor goes into the classes of the training department—the normal school's laboratory--why should he not hope to find a new or semi-new philosophy of teaching. He may or may not find anything new or startling, it matters not, he has done a better thing for himself and his school; he has been seeing more things and more closely, and his search is a spur to his best endeavor. He must not forget his greatest work, that of teaching and saturating himself with the teaching spirit, but this search for new truth will only enliven, vivify, illuminate his teaching. Silly experimentation is not within the scope of this suggestion. There are already too many experimenters in normal schools who work—or play—at the expense of the child, coining masses of unintelligible verbiage for molly-coddle teachers just to be in the limelight—rendering unto Caesar the things that belong only to the child.

V. To develop effective power for work and service in the teaching force—efficiency—the teacher must grow.

This last division of my theme is worthy of full treatment, but my time is up. Many will consider this closing topic the only pertinent suggestion in the paper. But, to my notion, the above suggestions are fundamental in maintaining efficiency, and therein is the secret of real power.

How shall the teacher grow in service, in scholarship, in professional power, in teaching ability, in character, in culture, in professional spirit? I simply take time to make a list of practical helps tried and true for the upbuilding of effective power among our teachers—a sort of teachers' decalog.

1. The regular faculty meetings: May be monthly, possibly one hour and a half in length. Purposes: general current business, announcements and directions for work, general criticisms and commendations on work

observed, round-table discussions on all topics of general interest to the entire normal community. Here the president should come into fellowship with the faculty and here he may begin to lift up his standards. The president should prefer to have a teacher absent a whole week from his classroom rather than from one regular faculty meeting.

2. Departmental meetings: May be monthly, possibly one hour in length, the hour before the regular faculty meeting a good time. A definite program should be carefully planned. A suggestion for one year's program is offered: For the first half-year let each program consist of one twenty-minute paper and one ten-minute paper on a departmental subject, to be followed by general discussion; for the last half-year present illustrative department work or training department class work to be followed by quiz and discussion.

3. The teachers' club: This is the teacher's study or reading-circle. All other worthy agencies to promote efficiency may be in operation and the machinery may be oiled until no squeak can be found, yet the school will fail of the highest efficiency unless the teachers read and study systematically. This club may meet fortnightly, possibly one hour and a half in length. Suggestion for program is made: For first half-year, study one up-to-date professional book with two or three other books for collateral reading; for last half, let each program consist of one formal paper of thirty minutes with full discussion following. Current news may be discussed. This work should be purely voluntary. All the teachers will be glad to be active members, if the *esprit de corps* of the school is what it ought to be. Give the faculty time for meetings, no overcrowding, and let the president take the initiative if there is to be a loyal, united faculty.

4. Encourage each teacher to write once a year a carefully prepared address or paper for the club or some association, or for the educational press. This should deal with a live professional problem or personal research.

5. The regular lecture course, fostered by the school.

6. Reading and studying the best educational magazines and journals.

7. Active membership in state teachers' associations and the National Education Association.

8. Occasionally the teacher needs to go to school, to become a pupil again. The summer school affords a satisfactory opportunity.

9. Sometimes a teacher may most surely grow by having an extra vacation. A term off duty for rest, recreation, and travel is good now and then. If possible observe the sabbatical year for teachers on half-pay. No great expense is incurred to the school, for competent substitutes are easily secured on the usual half-pay.

10. Visiting other schools two or three days each year will broaden and inspire every teacher.

Somewhat gingerly, I approach my concluding statements—but the truth shall make us free. If in order to develop effective power for work and service—efficiency—the president of a normal school has run the gamut of ministering agencies for efficiency, has set up his standards—the ideal school and ideal teacher—has tried to be a helpful supervisor and adviser, has tried to infuse new life into the organization, has rung the changes on teachers' growth, and has led in all these forward movements to the best of his ability: if he has done all this and is a progressive and means to have a progressive school, it will be necessary for the president to shake up somewhat rudely the dry bones of the standpatter teacher, the incompetent, the inefficient. I have heretofore suggested a president's slogan. I now leave a sentiment for the teacher's private den to be framed in acacia wood: The president of this school will select teachers who will help to lessen, not increase, the burdens of administration.

I come back to the preliminary statement made at the outset of this address: today the problem of efficiency in the teaching force of every normal school is largely a problem of administration.

FIRST REPORT OF THE COMMITTEE OF ELEVEN ON A PLAN OF NORMAL SCHOOL STATISTICS

HOMER H. SEERLEY, PRESIDENT OF IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA, CHAIRMAN

ORGANIZATION

Following the San Francisco meeting of 1911, W. J. Hawkins, the president of the department, appointed a Committee of Eleven to take up the entire problem of normal-school statistics and report a suitable plan for such standardization as seemed best to use in obtaining information regarding the public service and the public expenditures of state normal schools. The several members of this committee were each assigned definite districts comprising several states, and were advised to co-operate with the chairman in securing such information as might enable a satisfactory report to be drafted to meet the needs of this kind of educational organization and endeavor. This committee consisted of:

Homer H. Seerley, *Chairman*, Cedar Falls, Iowa
David B. Johnson, Rock Hill, S.C.
E. Oram Lyte, Millersville, Pa.
David Felmley, Normal, Ill.
W. S. Dearmont, Cape Girardeau, Mo.
Waite A. Shoemaker, St. Cloud, Minn.
Harry F. Estill, Huntsville, Tex.
Z. X. Snyder, Greeley, Colo.
Jesse F. Millspaugh, Los Angeles, Cal.
James M. Green, Trenton, N.J.
Ernest L. Silver, Plymouth, N.H.

THE PRELIMINARY PLAN

As soon as possible, the chairman submitted a tentative plan of details from which it was expected to select definite items that should be considered

as coming within the scope of such a report. This plan had in mind all the different things that state normal-school boards of management and officers of administration ought to know regarding the institutions they conduct, the kind of information that they should be able to give to the general assembly and to the public as well as the kind of facts that ought to appear in the reports of the United States Bureau of Education, in order to be of comparative value to the institutions represented in these statistical statements. These items were the following:

1. Income
2. Expenditure
3. Faculty
4. Students
5. Training department
6. Graduates
7. Course of study
8. Library
9. Plant
10. Equipment
11. Per capita cost
12. Economic use of the institution

These items were subdivided so as to give definite information regarding sources of income; varieties of expenditure of income; grade of scholarship, service, and authority of the faculty; kind, quality, and character of the students; grade, organization, and undertakings of the training department; variety and standard of graduating classes; extent, quality, and quantity of the courses of study; service, utility, and breadth of library, and equipment of all kinds; values of the plant given by the state; per capita expense of conducting all kinds of undertakings; the economic use of all parts of the institution and the degree of greatness of its helpfulness as compared with its cost.

OBJECT OF THESE INQUIRIES

It is a fact that the people and even the officers of the states do not know as they should the actual service of the public institutions. They do not know enough about them to fairly appreciate their necessity, their importance, or their helpfulness to civilization, nor do they comprehend their results or their endeavors for the public good. This condition of popular opinion does not need to exist, since a fair treatment of the questions of publicity and promotion must always bring their reward in better encouragement and support. The state normal schools, as a class, have been very slow to accept this need of a better understanding of their province, of their largeness, and of their undertakings, and hence they have hardly received the share of commendation, of expansion of service, or of popular appreciation that they actually deserve. It was to meet this known actual need, to cultivate this larger conception of the status of responsibility as institutions in normal-school circles, to develop this larger ideal of the greatness and the importance of the teacher in civilization, that a preliminary report was prepared for the February meeting and that a first report is now submitted for actual consideration and genuine criticism by the workers of this very important field of public endeavor.

THE RESPONSE

The acceptance of these ideals and views by the presidents of the state normal schools of the United States, when they were presented in detail thru the co-operation of the committee, was not very encouraging. More than three-fourths of them were very doubtful of the expediency of such an undertaking and many decided that such an enterprise was too worldly and too business-like in nature to deserve either personal attention or open criticism. In fact, they consigned the entire discussion to oblivion, concluding that neither statistics, publicity, nor comparative problems of institutional service were of such a character that they could afford to regard them as a part of their sacred duty to educational progress or to public enlightenment. They thus decided that all such studies belonged to the professional investigator and the would-be statistician, satisfying themselves that the present conditions and the limited status existing have been granted as acts of Providence and are undesirable of being changed or of being improved. Recognizing the conservative attitude as shown by manifest conditions, the chairman submits the following suggestions to the other members of the committee and to such members of the department as may be interested, with the hope that some positive conclusion may be reached within the coming year and a final report be able to be prepared and submitted for adoption at the next meeting of the department. It is recognized by the committee that the difficulties that have arisen are great, and that the differences of opinion that are found are numerous, and that the problems that must be solved are complex because of the many fundamental distinctions made by statutes, by ideals, and by circumstances over which the present institutions have but little control.

CLASSIFICATION OF SCHOOLS

It is necessary to recognize at the outset these fundamental conditions by adopting a general classification for the state normal schools in order to place each individual school in the class in which its constitution, development, and service naturally require. Until this is satisfactorily done any attempt at comparative statistics would be unreliable because the schools to be studied are so different that an actual comparison is impossible. It is not assumed that any one class is to be regarded as either better or worse than any other class. This report can have nothing to do with deciding the educational merit of the several classes of schools. Its only function is to point out these classes, to construct definitions marking out the characteristics of these classes, and assemble under each division the various prominent types and values that are found. By so doing, the more notable differences may be outlined, the more fundamental objects may be designated, and the special province assumed indicated. With this end in view a tentative proposition is hereby submitted for a possible classification. If this plan be approved, then the committee will be prepared to determine

the classification of each school and the character of statistics that each condition seems to demand.

STATE NORMAL SCHOOLS DEFINED

1. *First standard.*—This class of state normal schools is particularly marked by the emphasis placed on training in teaching. Such schools are chiefly notable for the number of pupils in their training schools and for the quantity of teaching they require where the practician is on his own resources and not under the immediate supervision of the faculty of the school. They assume that instruction in the theory and in the processes of elementary teaching is within their province but that academic and collegiate work in perfecting the scholarship of the teacher should be obtained in other kinds of educational institutions. They do not aim to affiliate with collegiate institutions and do not prepare the way for their students to obtain advanced credit from such institutions. This class of state normal schools includes many of those first founded in the United States. Massachusetts may be selected as developing schools according to this type.

2. *Second standard.*—This class of state normal schools is particularly marked by the emphasis placed upon the scholastic instruction that is deemed essential to the preparation of the teacher. Such schools maintain courses in the theory and processes of elementary teaching and also require definite training in the art of teaching in a well-organized and well-conducted training school. They accept as students high-school graduates and give them two years of instruction and training. They also accept as students those not high-school graduates and give them three or more years of instruction and training. They place much importance upon strengthening and expanding the scholarship of their students and they seek and secure recognition for part of this work from colleges and universities. Thus many of their students enter universities and colleges after graduation from the normal schools. These schools have large faculties for instruction as compared to the faculties for training and they have the equipment and the spirit of collegiate institutions. Such a type of normal school is found in many parts of the country and in several states with numerous variations as to plans and procedure as the conditions may require.

3. *Third standard.*—This class of state normal schools is adopted rather than founded by the state in which it is located. The buildings, grounds, and equipment are not state property, and the management is not state directed or controlled. The state makes appropriations which are distributed to such schools according to the number of teacher students that are taught and trained. Their work is not limited to the educating and the training of teachers because they receive and graduate students from other kinds of courses. This plan does not give uniformity in system or plan or scope, as each school has its own individuality and can decide its

own province and character. Results are determined by examinations given by state committees appointed for that purpose. Such schools are educational institutions where the preparation of teachers is one of the functions but not the sole function. Pennsylvania had developed teachers' training schools of this kind.

4. *Fourth standard.*—This class of state normal schools is like the second standard in many respects but is different in that such schools are also junior colleges as well as state normal schools. They are authorized by the state to admit Freshmen and Sophomore students who do not expect to become teachers and organize classes for them which strictly conform with the college work maintained at the state university. Such schools as these are now found in Wisconsin. There are also some other differences in the several individual schools because the different kinds of special teacher training are not uniformly organized in every school maintained by the state. This allowing differentiation where there are several schools founded by a state by giving each a special province is the plan that has been recently adopted in Kansas.

5. *Fifth standard.*—This class of state normal schools is organized and equipped to take students without secondary education and give them such scholarship as high schools give and in addition a notable amount of vocational instruction and training. Such schools are planned to unite the school and the home and prepare students for primary and elementary teaching. This class of schools is found in the South and is a notable agency in improving social and industrial conditions thru the instruction of their graduates in the common schools. Their province, their kind of equipment, and their needs are such that they can hardly be placed in comparison with other classes of state normal schools.

6. *Sixth standard.*—This class of state normal schools is of such a grade in scholastic work and is so comprehensive and collegiate in the organization and management that they are properly called state teachers' colleges. They are organized into departments, they are extensively equipped, they have many courses of study for all kinds of special teachers; they confer collegiate degrees of the Bachelor's standard; they train high-school teachers, principals, and superintendents; they have a training-school department with a highly trained faculty, covering the kindergarten, the primary school, the grammar school, and the high school; they develop teachers for special service rather than general service, they educate and train critic teachers for state normal school work; they are factors in all kinds of public-school education: in fact they are institutions rather than single schools and their administrative problems are complex and far reaching. Such schools as these are now in Iowa, Colorado, Indiana, Michigan, Missouri, and Kansas, and other states have institutions in process of development.

These variations are consequences of developments in educational

objects and demands that are continually appearing in the different states. Wherever social responsibility and social service are recognized as the basis of educational organization and improvement; wherever it is believed that the educational institutions should conform to the known needs of the age; wherever the normal schools are granted the liberty of initiative and adaptability; wherever they are accepted as wielding a notable influence on the public welfare; there they are among the most progressive, the most modern, and the most effective agencies that modern civilization has to meet the demands and the exigencies of the times.

OTHER INVESTIGATIONS

It has been suggested by some members of the committee that an investigation concerning the real work undertaken and accomplished would be much more useful, in which an attempt was made to get up statistical information regarding the kinds, variety, and special directions of instruction and training that were recognized as constituting the essential parts of a teacher's education. It is stated that state normal schools have now been long enough in existence to have reached some definite conclusions as to the standards that are agreed upon in the proper making of a teacher. This would be a profitable line of inquiry and should be undertaken. The standardization and the quantitation of this type of educational endeavor is worth the while even if it is extremely difficult because of so much difference in practice and in conception of the undertaking. Because of the interest in this field of inquiry that has appeared in numerous directions, because of the benefit that could arise from such a fundamental inquiry, it is believed that another national committee with a three-year plan of investigation and discussion would be a good enterprise for the department.

TOPIC: CITY TRAINING SCHOOLS AND THEIR MANAGEMENT

THE FUNCTION OF THE NORMAL SCHOOL IN TRAINING PUBLIC-SCHOOL SUPERVISORS IN TECHNICAL SUBJECTS: DRAWING, MANUAL TRAINING, HOUSEHOLD ARTS, MUSIC, ETC.

GRANT B. GRUMBINE, PRESIDENT OF STATE NORMAL SCHOOL, ALVA, OKLA.

Before determining the function of normal schools in training supervisors for drawing, domestic science, manual training, and public-school music, it is well to ascertain what various types of institutions are now doing in this work. In order to secure this information all cities having a population of over 25,000, and all colleges, universities, and normal schools so ranked by the federal commissioner of education were written. Many did not reply. Under certain conditions it would not be safe to

draw conclusions from the number that did reply, about 60 per cent, but the replies came from every state in the Union and the agreement is so large that it is considered safe to draw conclusions.

The state universities of Montana, Colorado, Arizona, Michigan, and Texas make no attempt to train supervisors in these subjects. The University of Oklahoma has just started a course in public-school music. South Dakota is just beginning courses in music and drawing. Kentucky has recently begun a four-year course in domestic science. Indiana offers courses in music and drawing; manual training will be given next year. Maine offers an excellent course in domestic science and intends to make the work of the highest order. The University of North Dakota gives courses in preparing supervisors in manual training, drawing, domestic science, and music; courses new and graduates inexperienced teachers. New York offers special courses in these subjects in its summer school. Nebraska has no special department for this work. Ohio has courses recently organized in manual training, domestic science, and drawing, but few students. Illinois offers courses in music and domestic science thru the year, manual training and drawing thru the summer session. Other universities made no reply and the inference may be that they are not interested in this line of work.

Of universities other than those maintained by the state, 75 per cent replying state that they offer no such courses. Princeton, Vanderbilt, St. Louis, Johns Hopkins, etc., comprise the list. The others state that courses are offered in one or more of the subjects, and rarely more than two. Several state that there is an excellent field to develop (if you please—develop), and will introduce such courses soon.

It is safe to say that the university has not entered this field. An examination of their catalogs shows that the courses they offer in these branches are for those seeking æsthetic development, and if they produce teachers, these go to city high schools, normal, and colleges of various ranks, rather than as supervisors to grade systems.

Replies were had from about a hundred and fifty colleges of various ranks. Sixty-five per cent offer no courses in these subjects. Thirty-five per cent pretend to do so. Upon examination of a few of the catalogs of those institutions which offer courses in these subjects, it is found that their courses are not such as one would recommend for the training of supervisors. It is admitted, however, that one who has supervisory ability and natural inclinations and talent to teach could by completing some of the courses offered in these institutions make a very efficient supervisor, but the courses offered are not essentially to train supervisors.

The city training schools offer courses in these subjects, but the purpose is, according to the statements of superintendents, to make the grade teachers efficient to handle this work, not as supervisors, but in the absence

of the supervisors. Ninety superintendents agree on this statement. The city training school is therefore eliminated.

The city high school is marvelous in its extensiveness. It is just beginning to appreciate its full field of usefulness. Its growth should have no opposition and every encouragement. Millions of girls and boys must necessarily look to this institution for the better and nobler ideals of citizenship. Replies from eighty-seven city superintendents state that their students are unable to so select subjects that at high-school graduation they are qualified for supervisory positions. Three of the ninety replying state that their graduates are able to do so. From these statements from city superintendents it can be concluded that the city high school is not in the field.

The technical subjects under discussion have been taught in some normal schools for many years, and it is safe to say that all normal schools are giving some attention to these branches at present. But it is a fact that very few are giving courses in these branches that would enable one taking them to become a first-class supervisor.

It is found that superintendents find the normal graduates (tho they may have elected heavily in these technical subjects) are not ready or able to assume the responsibilities of supervisory work in larger systems. And hence but few now look to the normals to supply their demand.

The superintendents of the larger systems go to the mechanical school for their manual-training man. They agree that generally this man is inexperienced as a teacher, but is selected because of his thoro training. It is also found that such men are more proficient as departmental instructors than supervisors because of their lack of experience and lack of the observation afforded by the normal schools. Those having the ability to supervise become excellent men after varying terms of experience, during which time the system in which they labor suffers more or less.

They are similar to the college graduates who teach. Ordinarily it takes them several years to learn by experience that which the normal school is able to give. Hence it is safe to assume that if the normal schools were to give as thoro and complete courses as the mechanical school gives in manual training, their graduates would be at the higher premium.

In this case the city superintendent selects the man highly proficient technically but lacking in pedagogical training, rather than the person with the pedagogical training but with less technical skill.

For supervisors of drawing and vocal music the larger systems draw upon the smaller ones and not infrequently select grade teachers who show more than average ability in these branches. No doubt such grade teachers, while students, did the major part of their work in these technical branches, and adding to this training some valuable experience as grade teachers they then become the valuable and efficient supervisor.

Not a few superintendents look to such schools as Stout Institute, Columbia, Drexel, Pratt, Crane, Simmons, Massachusetts Normal Art School, and Newcomb for their material. Most of these institutions require high-school graduation or its equivalent for entrance, and give four years' work, and very intensive at that, as a requirement for graduation.

These schools do produce supervisors. It is found that a large majority of their students have from one to five years' actual teaching experience before graduation. Their teaching before graduation is generally done in the smaller systems and they come in contact with all students from the first to the twelfth grade. This valuable experience, added to their training, which is of the best, gives them excellent qualifications for the positions under discussion.

Many supervisors of drawing and music come from the private studio and art schools. These persons are mature and highly trained, their greatest fault being that because of their lack of a general education they often lose sight of the end desired by the city systems. Too frequently they are searching among their many pupils for an artist, and during this search, pupils below the average ability suffer. And those below the average ability are the ones that need most attention.

This, however, is a weakness of many teachers (inability to reach the student that needs most the teacher's assistance). And herein lies the greatness of normal schools. When students have observed and taught under efficient criticism, their weak points as well as strong ones become evident. But the critic must be fearless and impartial.

It is believed that every source of supply of supervisors has been reviewed. The city training schools and high schools are not in a position to train supervisors in these technical subjects, nor do they have any desire to train them.

Stout, Drexel, Newcomb, Pratt, the Normal Department of the Art Institute, Chicago, etc., are no doubt in the lead for producing supervisors for the larger systems, and it is noted that many after having finished courses in normal schools and having taught for several years, desiring to make themselves still more efficient, take additional work at the above-named institutions. For this reason many of their graduates are experienced and therefore in demand.

The students who have four years of university training seldom enter grade work, nor care to, preferring the high-school position, and in this they receive encouragement from the university faculty.

But with the aggressive spirit evidenced by some deans of teachers' colleges the normals will have to be more spirited than they are at present if they wish to be felt in this field.

The real college has no desire to enter this field. The woman's college does not at this time offer suitable courses in these branches, in fact few heads of vocal departments in such institutions have correct conceptions of public-school music and its values.

It must not be inferred that the normals are not performing a great function in producing the kind of supervisor under discussion. Ninety superintendents in cities of over 25,000 inhabitants state that they do not go to normal schools for their supply of supervisory material. But where do they go? Ninety per cent state, to the smaller system, and these who are selected from the smaller systems are generally normal trained. Just because the graduates of normals do not enter the larger systems, just because these graduates are young and inexperienced, and a few more such reasons, is no cause to state that normals do not produce supervisors. No normal asserts that with its course of study and diploma ten years of strenuous experience is given.

Do colleges produce college professors? Do universities produce university presidents? They most certainly do. But not at the time of graduation. College professors and university presidents are results of experience and development, and supervisors are educationally in the same class.

Superintendents of the largest systems, where supervisory work is a large and real responsibility, refuse to call upon any school for material. One superintendent of a large system replies that he takes several years to select supervisors; has many names on file and keeps in regular touch with their progress, development, and success. In this manner he gets the very best. Of course they do not come directly from normal schools, but the majority are normal trained.

Few normal schools, however, require more than two years' work in any of these subjects after requiring twelfth-grade graduation for entrance. Generally this product is eighteen or nineteen years of age, entirely too young for responsible positions. And this is one of the salient reasons given by very competent judges of teachers for not going to normal schools for supervisors.

Here is where the normal must improve. A finishing course must be given—a course one or two years in length to supplement the two years now given and the several years of actual teaching experience.

It is dangerous to make courses too short, because of the narrowness of the product. Owing to the conditions of this age many persons do not take the time properly to fit themselves for responsible positions; some, because of finances, must in as short a time as possible fit themselves to draw incomes, others do not have the ability to stick. The normals must put their product in positions to be of service as soon as expedient, and this expediency is governed by local conditions which are different in various states. No rule can be made that is applicable to all, each institution must solve its own problems. But no school ought to descend to the level of some schemes improperly called business colleges which aim to fit men for responsible positions in thirty days, without grace.

Nor can courses be made too long. Enough material other than the

special subject should be required so that the product is well balanced. May we be immediately relieved from the unbalanced specialist!

In conclusion, let it be said that, after national investigation, it is found that more work is done by normal schools in preparing teachers for these positions than any other kind of school, and normal schools should by all means continue to keep the position they now hold. The only change necessary is to make their courses more extensive.

THE PROBLEM OF RELATING THEORY TO OBSERVATION AND PRACTICE IN THE TRAINING OF TEACHERS FOR CITY SCHOOLS

J. MONROE WILLARD, PRINCIPAL OF PHILADELPHIA NORMAL SCHOOL FOR GIRLS, PHILADELPHIA, PA.

The Philadelphia Normal School, founded in 1848, is the oldest city training school in the country. Prior to 1893 the normal department of the school was simply a postgraduate course of a year added to a three-year high-school course. In the normal year, book-geology, lectures in chemistry, a fairly good course in trigonometry, and another in logic were far more important than the brief course in the history of education, psychology, and so-called "methods."

Students "practiced" teaching in a school of practice for six weeks with a minimum amount of guidance. One teacher assigned all lessons in the primary grades, another in the grammar grades, and with them the pupil teachers "consulted" when either deemed it necessary.

Two-thirds of the time of the pupil teachers was spent in observation, but it was in observation of the work of other pupils, and nothing in the psychology of that date helped them to interpret what they saw. Moreover, the "methods" which they had previously studied were frequently quite independent of the methods followed in the practice school.

Needless to say practice teaching under such circumstances was an ordeal. Doubtless, it made some by throwing each on her own responsibility. Doubtless, too, it broke many. No certificate to teach was given those who thru timidity, due frequently to youth and modesty, failed to teach satisfactorily to the principal of the school. Because of the large number of pupil teachers, the principal frequently had not the opportunity to observe the work of each for more than three brief lessons.

Naturally, in 1893, when a new normal school was inaugurated with a two-years' course, following the regular high-school course, the pendulum swung the other way. Theory was magnified at the expense of practice. A school of observation and practice succeeded the old school of practice. In it there was an experienced teacher in every grade. The pupil teachers, instead of having the whole responsibility, now had practically none. Instead of being in the school for six consecutive weeks, they visited it in

the odd hours when the exigencies of the roster made it convenient to put them there. Instead of teaching all day and many days, they frequently taught as few as six more or less isolated lessons during their whole residence in the school.

Such was the point attained in the evolution of the problem when I became principal of the school in 1898. In the years that have elapsed I have been steadily and seriously endeavoring to readjust the work and place it on so sane a basis that neither theory nor practice shall be omnipotent, but that one shall serve as a handmaid to the other. I have not yet succeeded in getting as complete an interaction as seems to me desirable, nor, perhaps, do I myself realize all the potentialities hidden in a more perfect union between theory and practice.

I have ventured to preface this history of the Philadelphia Normal School to my account of the present relationship between theory and practice of teaching in the school, because it seems to me that most city training schools fall into one or the other of the three classes thru which we have passed. Either practice is everything and theory almost nothing, or theory is all-important and observation and practice either unguided or neglected, or both; or else the relative values of theory, observation, and practice, all are recognized as well as the value of each to the other and the dependence of each upon both the others.

It is my desire to give as clear a concept as possible of the work we are trying to do, and of the conditions secured for its performance. It is proper to remark that the Normal School, in which the work of training teachers for the elementary schools ends with their certification, includes and embraces the Normal Department, the Department of Observation and Practice, and two Adjunct Schools of Practice with their fifty classes of children of all elementary grades and the kindergarten. These practice schools are our laboratories of teaching. Their faculties are composed of skilled teachers selected by the principal of the Normal School upon the recommendation of the superintendent of city schools, and receiving increased compensation for their services.

The qualifications for admittance to the Normal School demand four years of good high-school work on the part of the applicant and bona fide residence in Philadelphia. The course of study requires two years of professional study and practice in teaching.

In the Junior year the subjects of the curriculum of the elementary schools are considered always from the viewpoint of the teacher. In most subjects these reviews hinge largely on the question of method. In other subjects, however, as history and geography, no method work is suggested until later. We consider it most important that our students get an adult attitude toward these great subjects, something that they have not earlier attained, perhaps, by reason of their youth and immaturity of mind.

In the Senior year the practice work of our students covers a period of

four consecutive months. During the first two months the students are assigned to methods, and to the Department of Observation and Practice directly connected with the Normal School, spending four weeks in grammar and four weeks in primary grades. One "major"[1] subject is taught daily by each student, planned by her under the personal direction of the teacher of methods in that special subject. In this way each method teacher aids the student in the intelligent application of the method of her department.

Student teachers are responsible also for the teaching of whatever "minor" subjects may be given to them. All lessons are assigned by the training teacher but their preparation is under the direction of the teacher of methods. When not teaching, students are expected to observe the lessons of the training teacher and to note carefully the routine and the management of the classroom. Before entering upon practice work specific directions respecting observation by student teachers are given by the critic teachers, and every effort is made to train them to observe intelligently.

The last two months of the practice period are spent in the Adjunct School of Practice. Here student teachers teach all subjects and are responsible for a certain amount of the clerical and monitorial work of the classroom—directed by the training teacher.

In order to present more definitely the plan of observation and practice let us consider first the parties concerned in carrying it out for the first two months. There are on one side the student teacher; the training teacher —in whose class the student teacher gets her practice teaching for one month; the method teacher—in charge of the subject to be taught; and the critic teachers, whose duty it is to observe the student teacher's work and in the end give judgment respecting her ability to manage and teach a class, all working together to secure for the student teacher the training necessary to fit her to enter a classroom, take charge, and succeed. On the other side, we have the children to be taught—the class.

The Senior class is divided as equally as may be into four parts or sections for the purpose of giving to each section two months of theory, observation, and practice, followed by two months of general practice. During the first two months half the student teachers teach on Mondays and Thursdays and the others on Tuesdays and Fridays. On the remaining three days they are engaged with their teachers of methods. Each student must teach her "major" subject each day and any "minor" assigned to her. At the end of their first four weeks a rearrangement of student teachers is carefully made, those having had primary work for the first month taking grammar work the second, and vice versa.

Since the number of student teachers is divided into two equal parts, the "major" subjects are likewise divided—one-half the student teachers receiving their assignments from arithmetic, language, or reading, and the

[1] Language, reading, arithmetic, history, geography, nature-study—arbitrarily termed "major" subjects.

other part from history, geography, or nature-study. This arrangement is reversed for the second month.

While the schedule for the student teachers in the School of Practice is made out in advance, so far as "major" subjects are concerned, the training teacher assigns these lessons always one week prior to the date on which the teaching is to be done. The student teacher meets the method teacher at the close of the daily session and repeats to her the assignment in writing. After giving her such directions as are needed in the way of preparation of the lesson to be taught, she dismisses her to return with a plan of the lesson at the same hour two days before her teaching, when her plan is approved or returned for change, and the character of her preparation is carefully investigated.

The roster of the method department of the Normal School is made out with that of the School of Observation and Practice as a basis, which makes it possible for the method teacher to observe the work of the most of her staff of young teachers, and this works to the advantage of both. The critic teacher, however, is free from the fetters of the classroom and makes her own daily roster of rounds carefully observing the teaching, and at the close of the day gives such criticisms as are needed to improve the quality of the work and to increase the power of the teacher. Thus, it will be seen that theory finds its expression in practice day by day, under the watchful care of those who feel responsible for its inculcation, as well as by the compelling influence and power of the presence of the critic teacher.

No student teacher is permitted to teach who has failed to meet the requirements of her method teacher in the work of preparation, and should she fail in the classroom to teach to any profit on account of indisposition, nervousness or other cause, the training teacher so tactfully assumes the burden that the class is well-nigh oblivious to the exact condition of affairs, and the student teacher still holds the respect of the children.

After these two months devoted to theory and practice, the student teachers are placed in the Adjunct Schools to complete the period of four months allotted to this work. Here they teach every day and every subject, receive instruction in keeping class and daily records, take charge of classes during the temporary absence of teachers, and learn the general duties of the classroom. The critic teachers follow them into these schools, the work of the teachers of methods being confined exclusively to the preliminary training in the Normal School.

Opportunity for observation is here more extended and the requirements are more exacting. The student teacher now reviews certain chapters of Kirkpatrick's *Fundamentals of Child Study* in use in the department of psychology, and prepares for coming discussions, following its outlines in reports on her observations. Each critic teacher meets her group of student teachers specially each week for one hour. At this meeting, general suggestions based on the observations of the critic herself, or brought to her

notice by the training teachers, are presented to the group. Students discuss also subjects previously assigned, such as bear on methods, classroom routine, and discipline. Individual criticisms are given to all students, but those showing greatest weakness receive special attention. In her talks, the critic aims to open the eyes of her student's understanding to the highest achievements of each training teacher, of whom she has had four, all excellent trainers, but each possessing some special gift, some personal power, all her own. To lead these student teachers to recognize this power, and to get from each personality the greatest help, means a tremendous uplift to them.

Before leaving the Adjunct Schools of Practice the student teacher prepares quite an exhaustive report of her study of the fourth month's class and of one child in this class. Her last individual conference with the critic teacher consists of an oral review or summary of her entire four months' work. In this review she tells of her efforts to correct serious faults and to develop along proper lines. The critic teacher reads from her notes, as the student teacher proceeds, any comments bearing upon these points and upon the student teacher's progress—tries tactfully to make suggestions and to lead the student to talk freely and informally. The student also tells in her own way of what, to her, has been the great value of this period of practice—how it has supplemented her professional training—what definite equipment it has given to her for work in our elementary schools.

No mark or average is given for reports on observation—the object being to keep the student teacher actively working along good lines, and actively thinking because her thoughts will be asked for. Its value to the critic is that it gives close and sympathetic contact with her students, a chance for personal word and inspiration, and helps often to make clear the girl's weakness in teaching.

Under the rules of the Board of Public Education of Philadelphia every graduate of the Normal School for Girls is entitled to a certificate to teach in our public elementary schools. Where scholarship attained, teaching instinct shown, and teaching power developed, have reached a degree sufficiently high to justify expectation of success as a teacher, a permanent certificate is issued by the board. Otherwise, a "trial" certificate is given —good for one year from date of appointment as a regularly elected teacher. If the holder, within that time, demonstrates to the satisfaction of the superintendent of schools her ability to manage a class and teach, he so reports to the board, and she receives a permanent certificate in lieu of her trial papers. Otherwise she forfeits further claim for consideration and is barred from the profession.

Inferior teaching power almost invariably accompanies a low grade of scholarship. In support of this statement I may draw from the records of the last class which numbered 291 graduates. Forty-three trial certificates were issued—nearly 15 per cent of the class. Taking the graduates in the

order of their standing there were two trial certificates issued in the first hundred (2 per cent); five in the second hundred (5 per cent); and thirty-six in the last ninety-one or 40 per cent. In the last twenty-five the percentage arose to 64.

Extreme care is exercised in determining the quality of the qualifications of the candidate during her four months of practice. While the responsibility for the grading rests primarily with the critic teacher, her final judgment is not lodged until she feels that she has given full consideration to those of method and training teacher, whose professional relations with the student teacher cause them to observe her from different points of view.

At the end of each month the principal of the Normal School receives from each training teacher, on blanks provided for the purpose, a carefully prepared report for each of her student teachers, discussing the work done, using the following topics as a basis: personality—language; intellectual ability—preparation; teaching power—teaching instinct; originality in methods and devices; ability to govern.

At the end of the year, therefore, there are for every graduate four reports, written by as many training teachers, on the topics just enumerated. In addition to these four, an additional report is made by the critic teacher in the case of every graduate receiving a trial certificate. I consider these reports very valuable, containing as they do all the information required in justification of the decision reached.

In discussing the subject of this paper it has seemed necessary to give in considerable detail the plan which we have followed in the main for the last few years, which I shall briefly summarize as follows:—

a) The amount and distribution of time devoted to practice teaching.

1. All Senior students spend at least two days a week for two months in the School of Observation and Practice. Part of this time is spent in the observation of the work of training teachers, but they themselves teach daily.

2. All Senior students spend five days a week for two months in an Adjunct School of Practice. Here they are given greater responsibility and have broader latitude in teaching. At the present time an experienced teacher is in charge of each grade except two. Eventually it is hoped that by enlargement of the buildings and reduction in the size of classes to thirty-five or less, each training teacher may have charge of two classrooms; thus giving more practice and more responsibility to the student teachers.

b) The method of directing the studies of observation and practice.

1. Each subject of the curriculum is in the hands of a specialist who is responsible for the methods employed in the School of Observation and Practice as well as those used by the student teachers. The training teachers assign each lesson, but the plan for it must be submitted to the specialist and approved by her before the student is allowed to teach. The specialist observes the work of the student teacher and criticizes it.

The specialist herself in many cases teaches lessons in the School of Observation and Practice for the benefit of the student teachers, allowing them in turn to criticize and question her devices and methods and results.

2. The psychology teachers also use the classroom as a clinic, and critic teachers, knowing neither the students nor their preparation, give the students an unprejudiced judgment.

Finally:

The verdict of the Normal School, that is to say the combined ratings given for scholarship, for preparation of lessons, and for the actual teaching, determines the professional standing of the teacher. School principals, outside of the Normal School including the Schools of Practice, have no share in the training of teachers prior to their appointment.

DEPARTMENT OF MANUAL TRAINING AND ART EDUCATION

SECRETARY'S MINUTES

President—CLIFFORD B. CONNELLEY, Carnegie Technical Schools.....Pittsburgh, Pa.
Vice-President—ISABEL BEVIER, University of Illinois.....Urbana, Ill.
Secretary—W. A. DUNN, principal, Polytechnic School.....Los Angeles, Cal.

FIRST SESSION—MONDAY FORENOON, JULY 8, 1912

The meeting was called to order in Fullerton Hall, Art Institute, Chicago, Ill., at 9:45 A.M. by President Clifford B. Connelley.

Paul Kreuzpointner, chairman, Industrial Committee of the American Foundrymen's Association, Altoona, Pa., was appointed secretary *pro tempore.*

The meeting of the nominating committee was then announced.

Clifford B. Connelley, dean of the School of Applied Industries, Carnegie Technical Schools, Pittsburgh, Pa., then gave the president's address, entitled, "Citizenship in Industrial Education."

A paper on "The Relation of the Elementary School to Subsequent Industrial Education" was given by William T. Bawden, Teachers College, Columbia University, New York, N.Y.

This paper was discussed by Charles A. Bennett, professor of manual arts, Bradley Polytechnic Institute, Peoria, Ill.; Paul Kreuzpointner, Altoona, Pa.; Emery T. Filbey, University of Chicago, Chicago, Ill.; Arthur L. Williston, principal of Wentworth Institute, Boston, Mass.; Robert W. Selvidge, professor of manual arts, University of Missouri, Columbia, Mo.; Frank Ball, director of industrial training, Pittsburgh, Pa.; Paul J. Bast, Lakewood High School, Lakewood, Ohio; W. I. Heiser, Manual Training High School, Indianapolis, Ind.; Frank M. Leavitt, associate professor of industrial education, University of Chicago, Chicago, Ill.; and Charles A. McMurry, director of Normal Training School, De Kalb, Ill.

"The Report of the Committee on College-Entrance Requirements" was then presented by Arthur L. Williston, principal of Wentworth Institute, Boston, Mass.

The meeting then adjourned.

SECOND SESSION—TUESDAY AFTERNOON, JULY 9, 1912

The meeting was called to order by the president at 2:40 P.M.

The reading of the minutes of the previous meeting was dispensed with.

The first paper, on "The Significance of the Industrial Arts in the Schools," was presented by Charles A. McMurry, director of Normal Training School, De Kalb, Ill.

Frank M. Leavitt, associate professor of industrial education, University of Chicago, Chicago, Ill., then read a paper on "Some Sociological Phases of the Movement for Industrial Education."

This paper was discussed by William J. Bogan, principal of Lane Technical High School, Chicago, Ill.; C. A. Prosser, secretary, National Society for the Promotion of Industrial Education, New York, N.Y.; David Snedden, commissioner of education,

Boston, Mass.; George S. Waite, superintendent of manual training, State Normal School, Kalamazoo, Mich.; Charles A. McMurry, Normal Training School, De Kalb, Ill.; and Paul Kreuzpointner, Altoona, Pa.

The nominating committee was appointed by the chair as follows:

William J. Bogan, principal of Lane Technical High School, Chicago, Ill.
Lucy S. Silke, special teacher in drawing, public schools, Chicago, Ill.
John C. Brodhead, assistant director of drawing and manual training, Roslindale, Mass.

The meeting then adjourned.

THIRD SESSION—Wednesday Forenoon, July 10, 1912

The meeting was called to order in Fullerton Hall, Art Institute, Chicago, at 9:15 A.M. by L. D. Harvey, president of Stout Institute, Menomonie, Wis.

The first paper was presented by Fred D. Crawshaw, professor of manual arts, University of Wisconsin, Madison, Wis., and was entitled, "Needed Changes in Manual Arts."

This was followed by a paper on "Is the Introduction of Technical Subjects in the Eighth Grade Advisable?" which was read by Wilson H. Henderson, supervisor of manual training, Springfield, Ill.

Discussion was opened by E. A. Wreidt, University of Chicago, Chicago, Ill., who was followed by: Robert W. Selvidge, professor of manual arts, Teachers College, University of Missouri, Columbia, Mo.; L. L. Summers, director of manual training in State Normal School, Oshkosh, Wis.; and L. W. Wahlstrom, Francis W. Parker School, Chicago, Ill.

After the discussion the meeting was adjourned.

FOURTH SESSION—Thursday Forenoon, July 11, 1912

The meeting was called to order by George N. Carman, director of Lewis Institute, Chicago, Ill., at 9:30 A.M.

"The Manufacturers' Viewpoint of Industrial Education" was presented by C. R. Dooley, Educational Department, Westinghouse Electric and Manufacturing Co., Pittsburgh, Pa.

This was followed by a paper on "Modern Apprenticeship Training" by James A. Pratt, director of Williamson Free School of Mechanical Trades, Williamson P.O., Pa.

The discussion on this paper was opened by Charles F. Perry, supervisor of industrial education, Milwaukee, Wis., who was followed by Lewis Gustafson, superintendent, the David Ranken Jr. School of Mechanical Trades, St. Louis, Mo.; Frank H. Selden, director of Department of Mechanical Science, State Normal School, Valley City, N.Dak.; H. E. Miles, of the National Association of Manufacturers, Racine, Wis.; E. G. Cooley, Chicago, Ill.; and Arthur L. Williston, principal of Wentworth Institute, Boston, Mass.

The meeting adjourned at 12:15 P.M.

FIFTH SESSION—Thursday Afternoon, July 11, 1912

The meeting was called to order at 2:30 P.M. by Isabel Bevier, president of the American Home Economics Association, and head of the Department of Household Science, University of Illinois, Urbana, Ill., acting chairman.

The first paper, on "Distribution of Income, $500, $1,000, and $2,000 per Year for Family of Five," was presented by Mary S. Snow, supervisor of household arts in public schools, Chicago, Ill.

Isabel Bevier, head of the Department of Household Science, University of Illinois, Urbana, Ill., then presented a paper on "Dietetic Standards for These Various Households."

A paper on "Obligations to Society for the Three Standards Presented" was read by Mrs. Raymond Robins, head of the National Women's Trade Union League, Chicago, Ill.

Irene E. McDermott, director of household economy, Pittsburgh public schools, Pittsburgh, Pa., and Carrie H. Lyon, instructor in cooking and housekeeping, Margaret Morrison Carnegie School for Women, Pittsburgh, Pa., discussed this paper.

The Committee on Nominations presented the following report:

For *President*—Arthur L. Williston, principal of Wentworth Institute, Boston, Mass.
For *Vice-President*—Lillian S. Cushman, School of Education, University of Chicago, Chicago, Ill.
For *Secretary*—Irene E. McDermott, director of household economy, Pittsburgh public schools, Pittsburgh, Pa.
For *Corresponding Secretary*—Robert W. Selvidge, professor of manual arts, Teachers College, University of Missouri, Columbia, Mo.

The meeting adjourned at 5:00 P.M.

SIXTH SESSION—FRIDAY AFTERNOON, JULY 12, 1912

The meeting was called to order at 2:30 P.M. by Elizabeth Buckley, supervisor of art, Chicago, Ill., acting chairman.

A paper on "The Place of Art in the High School of Commerce" was presented by J. Earl Griffith, Central Commercial and Manual Training High School, Newark, N.J.

Walter Sargent, professor of æsthetic and industrial education, University of Chicago, Chicago, Ill., then read a paper on "The Value of Art in the Industrial School."

Florence E. Ellis, supervisor of drawing, Cleveland, Ohio, presented her paper on "The Dresden Congress."

A paper on "Vocational Training Old and New" was then read by T. Vernette Morse, president of Artcraft Institute Guild, Chicago, Ill.

This paper was discussed by Emma M. Church, director of Chicago School of Applied and Normal Art, Chicago, Ill.; Josephine Locke; John C. Brodhead, assistant director of drawing and manual training, Roslindale, Mass.; and Lillian S. Cushman, School of Education, University of Chicago, Chicago, Ill.

The meeting then adjourned.

PAUL KREUZPOINTNER, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

CITIZENSHIP IN INDUSTRIAL EDUCATION

CLIFFORD B. CONNELLEY, DEAN OF SCHOOL OF APPLIED INDUSTRIES, CARNEGIE TECHNICAL SCHOOLS, PITTSBURGH, PA.

It has become self-evident to speak of the present day as a period of industrial unrest. Whether the very fact that such a statement has come to be axiomatic is a circumstance which should give us cause for grave worry, or whether, on the other hand, the fact itself should be treated as an encouraging bit of evidence of the progress of the times—an indication that men have begun fully to appreciate the proper relative values between production and the producer—are questions which do not concern the educator nearly as much as does the question of what education itself can do to meet the acknowledged condition of things. The attitude

of capital toward labor, and the view which labor takes of capital are not, considered as abstract questions, the primary province of the teacher of industrial education. But in so far as the inculcation of industrial training and the teaching of the useful arts will bring about a better understanding between employer and employed—in so far as it will help the one to appreciate and the other to understand their rights and obligations in respect of the other—in this respect, I say, the aims and efforts of the educator in the fields of industrial training may become living forces and vital factors in the proper adjustment of society.

The theme of my remarks today is a consideration of citizenship as it is affected by and as it affects industrial training. It is therefore fitting that a word be said on the subject with which I have chosen to preface my observations, for, after all, there can be no true citizenship in the highest and most developed sense of the term so long as one large class of the social body manifests a constant antagonism toward another large class of that same body. The organization of society—or of the state, as it is sometimes called—depends fundamentally on the willingness of each individual to surrender some rights and some liberties for the sake of the general public good. Were man contented to live alone and apart from all his fellows—conceding for present purposes that such a condition might be possible—there should be no need for self-sacrifice, there should be no necessity that one should give up this right and another that privilege in order that a community of men should exist as a compact body. But man is not so constituted that he can live entirely alone. Man was formed for society, and society, or state, there must be if man is properly to enjoy the privilege of existence; community there must be if man is to enjoy life, liberty, and the pursuit of happiness, for without community and state the weak must perish before the onslaught of the strong, the fittest must always triumph thru the extermination of the less fit. Man recognizes this and therefore he forms himself and his fellows into communities and compacts of society, and in this community or state he places his trust and his faith, in the hope that thru it he may ultimately achieve those ends which his Creator intended for him.

Sir William Blackstone says:

> The only true and natural foundations of society are the wants and fears of individuals. Not that we can believe with some theoretical writers that there ever was a time when there was no such thing as society, either natural or civil; and that, from the impulse of reason, and thru a sense of their wants and weaknesses, individuals met together in a large plain, entered into an original contract, and chose the tallest man present to be their governor. This notion of an actually existing unconnected state of nature is too wild to be seriously admitted, and besides it is plainly contradictory to the revealed accounts of the primitive origin of mankind, and their preservation two thousand years afterward. It is the sense of their weakness and imperfection that keeps mankind together; that demonstrates the necessity of this union; and that therefore is the solid and natural foundation, as well as the cement, of civil society. And this is what we mean by the original contract of society; which, tho perhaps in no instance

has it ever been formally expressed as the first institution of a state, yet in nature and reason must always be understood and implied, in the very act of associating together: namely, that the whole should protect all its parts, and that every part should pay obedience to the will of the whole, or, in other words, that the community should guard the rights of each individual member, and that, in return for this protection, each individual should submit to the laws of the community; without which submission of all it is impossible that protection should be certainly extended to any.

It must follow from the very essence of the constitution of society, as indicated by Blackstone, that no community can prosper, no state can succeed, where this giving-up of individual rights for the common good, this merging of privilege into public necessities, is not properly understood and appreciated by the individuals who endeavor to make up that community. Citizenship, as I take it, denotes, in its highest form, this true appreciation of the relative rights of man and state—the willingness, from motives of unselfish sincerity, to give up some of man's inherent natural freedom for the public good and to cast individual rights and individual privileges into the crucible of the state, from which shall emerge a metal of the purest type, deriving strength from the lasting qualities of its ingredients, and power from the very gathering-together of these same qualities. Citizenship, as thus expressed, denotes the noblest bond between man and man in the social community. It speaks of loyalty and trust as terms that are evidenced in the practical affairs of individuals and unites all of them in the common brotherhood of organized communities. No state in which citizenship is thus understood and developed need fear for its ultimate success; no community in which men and women live up to the appreciation of these relations need have serious doubts as to its future.

I am sure that I should meet no dissenting voices if I should say that no factor in the world's history has contributed more to the realization of true citizenship than has education—education in the home and in the school; training, both ethical and mental, at the fireside and in the schoolhouse; the development of the minds of men and children. Side by side with the growth of the state has been the growth of the public-school system; as the one has prospered the other has grown; or should I reverse the order and say that as the school has prospered the state has grown? Rome, in the days when Rome was powerful and great—the Rome of the Caesars and the world-wide rulers—was a Rome of learning and of mental advancement. And when Rome forgot the value of learning and of culture, its days of power became but as the grass of the fields, for the winds of licentiousness and destruction passed over it, and the place thereof knew it no more. Greece, in the years when Greece was the world's center of progress and commerce, was a Greece where art flourished and literature held the highest places. And when Greece neglected its arts and learning—when the nation's men of wisdom were forced to bow before the onslaughts of unrestricted pleasures and unrestrained privileges—Greece could do naught else but wrap the draperies of its shroud about

it and lie down to everlasting sleep. What does all this mean, if it does not mean that citizenship had failed, that national power had crumbled merely because education and enlightenment had been relegated to realms where few men trespassed, to fields where few would wander? These sentiments were expressed by our dear Dr. C. M. Woodward, of Washington University, St. Louis, Mo., to whom we all owe so much, more than twenty years ago.

In no civilized country in the world's history has the public school been so idealized as in our own. Statesmen have denominated it "the bulwark of liberty." Historians speak of it as the power which holds the balance between equal rights. Sociologists praise it as the common meeting-ground for the poor and the rich, for the weak and the strong—the assemblage of the children of men, where democracy has both its birth and its salvation. Legislatures have given freely of the means of the state in order that the public-school system may be properly maintained and in so doing, they are but giving expression to the desires of their constituents. In some of our states the appeal of the public school has struck the citizens with such vital force that they have not left the future of the system to the will of the legislatures alone, but have, thru constitutional provisions, made it mandatory on these representatives of the people that the public school be given both constant and liberal support. As an instance of this, I point to the constitution of my own state of Pennsylvania, wherein is to be found the following provision:

> The general assembly shall provide for the maintenance and support of a thoro and efficient system of public schools, wherein all the children of this commonwealth above the age of six years may be educated, and shall appropriate at least one million dollars each year for that purpose.

This constitution was adopted in the year 1874, and tho in those thirty-eight years reformers and critics have assailed many of the provisions of that organic law, not one has raised his voice in protest against this specific clause, for all of them, whether they be friend or foe, have realized that, thru this direct provision for education, the people of the commonwealth whose voices made that constitution the organic law of the state at the same time made indirect provision for the assurance of future citizenship in its highest form. It is worthy of note, in this same connection, that tho this constitution was adopted thirty-eight years ago, in a period when vast fortunes, as we measure them now, were few indeed, yet the people insisted that at least one million dollars be given each year to the support of the public schools. It is hard for us of the present day fully to appreciate what a sum of this proportion meant to the men of 1874, but we can be sure that they must have considered even that amount, great as it seemed to them, not a trifle too large for the purpose to which it was to be applied and since that time it has increased many, many times. I am sure that similar provisions are to be found in the constitutions of

other states, and that in those states as in Pennsylvania, the successive legislatures have given lavishly and with a free hand of the funds of the commonwealth in order that the public school might continue to educate our children and thus to prepare them for the responsibilities of true citizenship.

What part has industrial education played in this training for citizenship? True, the industrial feature of our school system is not a thing of ancient origin. Men did not at once realize the possibilities of this development of the hand along with the development of the mind along cultural lines, and it was many years after our public-school system had its beginning before industrial education as an organized department of the curriculum became ingrafted on to it. But there came a time when those who could see far ahead, who could pierce the mist that enveloped the present and separated it from the future—there came a time, I say, when men and women of this caliber in the educational field began to demand that the hand and the industrial side of our children be developed along with the purely academic side. Like a voice crying out into the night came the firm tones of these fearless and far-sighted educators, insisting that our public schools were doing but a part only of their duty so long as they continued to neglect industrial education. Men and women who had been trained according to the old order of things first stood amazed at this new demand. Then amazement gave way to curiosity and interest, so that the pioneers of industrial education were at least given a hearing. Then, gradually the opposition began to wear away—one by one the clouds were shifted, step by step the rocks were scaled—and soon here and there thruout the country experiments were begun to give this new idea a practical test. And it was just this "practical test" which alone was needed to insure success for the efforts of these pathfinders of industrial education, for wherever the experiment was made, there friends were added to the cause and the movement found supporters. The way was not entirely free from difficulties—here and there a thorn of the old opposition extended itself and attempted to retard the onward march by its scratches. But they who marched were too earnest to be stopped by thorns, too zealous to be retarded by difficulties. They had a mission to fulfill, and tho, like all persons who have a message of progress to bring unto mankind, they were reviled and scoffed at, still kept their faces toward the rising sun and moved steadily onward, until at last their cause triumphed.

Men and women began to feel the inspiration of their enthusiasm and to like it. The little children brought home to their parents strange tales of wonderful new courses in the public school, where the child's aptitude for mechanics and industrial art was given an opportunity for free play. Fathers and mothers saw the fascination which the "new education" had for their sons and daughters, how it broke the monotony of endless poring over books, and, best of all, they saw their children mani-

fest an interest in the manual-training courses which has no analogy in the school life of these same fathers and mothers. A new force had come to kindle the interests of the little folks in their school hours—a vital magnet that seemed to draw them nearer and nearer because it was so wonderfully interesting and attractive. The hours of idleness in the lives of the children decreased and the moments of usefulness came to take their places. And the elders looked on with satisfaction, for they began to realize that a new force for better citizenship had been injected into the lives of their children. Industrial training had come to stay, for both the children and their parents liked it, and, what is even more important from the viewpoint of the educator, the new form of education proved to be a very useful and instructive one.

If there is one particular thing that all men who study the question of citizenship understand, it is that individuals can be true citizens only in the proportion that they are useful citizens, and no man or woman can be altogether useful who has not had all his faculties developed. It was this vital point in the production of citizenship that industrial education laid hold of from its earliest day, and which became the surest safeguard for the permanency of this new form of education in the life of the American public school. Both educators and laymen felt the need of the proper development of all of the faculties of the children, and the realization of this need paved the way for the system which was to provide the opportunity for filling this very need. Children are so constituted that their hands as well as their minds must be employed if they are to be kept wholly free from the vice of idleness. No normal child in possession of all its faculties can be convinced that its welfare is being thoroly considered so long as it is compelled to keep its hands inactive thru the long hours of the school day, and it follows from the very nature of the child itself that if it is not given a useful and desirable way in which to employ those same hands during part, at least, of the school hours, it will find for itself some means of exercising those very parts of the human body which the Creator evidently intended should be used actively and frequently. Whoever has had much experience with school children will admit that the kind of employment which the child usually finds for its hands if left to its own choice is not always the most useful or the most desirable kind. It follows, too, that much of the educational development for citizenship which comes thru mind-training alone must be lost by the opposing influence of the improper employment of hands at the same time. Therefore, in so far as industrial education has given the child a healthful method of employing its hands in a practical and desirable way, it has helped to extinguish some of the influences which retard the growth of true citizenship and has, incidentally, been a support for mental training in the direction of the development of this same citizenship. If industrial training had done nothing more than give the children of the schools an opportunity to exer-

cise their hands and mechanical natures in a useful way, it would be justified in laying claim to the designation of a vital influence in the production of good citizens. It has done this and much more, as the history of industrial training in the public school itself will demonstrate.

There has never before been a time in the history of industrial education when we have been able to get as many men and women interested in this phase of the work at any one convention of the National Education Association. You will note by the program that we have tried to cover all phases, as the universities, technical schools, colleges, and high schools (the latter supported by public expense) are trying to formulate plans where they can train the young men and women technically. If the young men and women of our country will follow the advice and take cognizance of the training they receive from such people as we have on our program, I feel reasonably sure that this country of ours in a few years will feel this training as to the citizenship of its people. The manufacturers of today, as you all know, are spending every energy possible, in many cases at a loss financially, to educate their apprentices. Whether this is a selfish motive of the manufacturers or not, the fact remains that a man skilled at any work he is doing, will, of necessity, become more happy and a better citizen.

Outside the school, this same training has shown its beneficent influences. There was a time when young men and young women, after leaving school, came to the workshops and mercantile establishments well trained in mind but absolutely undeveloped in the practical side of their natures. What was the result? Employers of labor could not afford to keep such young men and women in their employ until this practical side had been developed by experience, for the keenness of competition would not permit of this. Consequently, both employer and employed were dissatisfied—the former because of the employee's lack of practical knowledge, and the latter because of the employer's apparent attitude of displeasure. The period in the life of a young person in which he enters the realms of the earning class is a very critical one, and upon its success or failure depends to a great extent the future career of this person. It must be apparent that a period in which dissatisfaction plays a prominent part cannot be a very successful one, and that its impression will leave its effects on the entire life of the young man or young woman. Consequently, one beginning his career under such a handicap as that above suggested will have an extra battle to fight in the attainment of those qualities which best fit men and women for citizenship. Industrial education has recognized this and, since its adoption in the school system, much of the dissatisfaction between employer and employed has been eliminated, for the employer has come to realize that his young employee has learned that one's hands are intended for useful and efficient work in practical directions.

Perhaps the severest test which the training for citizenship is put to is that which comes when the graduate of the school enters the money-earning classes, for the best or the worst that is in a man comes to the surface when he embarks upon the modern-day pursuit for the symbol of material wealth and the means for sustenance and comfort. It is this struggle on all sides for money, whether it be for enough to sustain one's self and family or whether it be for larger sums and greater fortunes, that is the underlying cause of much of the present-day friction between capital and labor. On the one hand, we find men fighting forces which they think have kept them down, and on the other hand, we find men combating the growing power of combinations of labor. To the student of economic conditions, it must be manifest that much of this struggle is the result of misunderstanding on the part of both sides. But, be the reason what it may, the truth remains that citizenship cannot attain its highest purpose in any community in which there is a constant struggle between employer and employed. Industrial education can become a useful force in bringing these classes together by offering to the prospective employee an opportunity for developing his mechanical side to that point where his skill and ability will of itself command the attention of the employer and make it less difficult for the former to secure that portion of the profit of production to which his labor entitles him. On the other hand, since no employer in these days of fierce competition is long ignorant of the fact that in the degree in which he employs skilled men his profits will be measured, industrial education will, by training young men and women on the practical side, develop the best that is in its subjects and enable the employer to find persons not only anxious but also able to contribute their skill to the employer's business, thus increasing his profits and making him more willing to share with his employees the benefits which their abilities have brought to him. As a result, the gap between capital and labor must constantly be decreased, each must understand the other better, and one of the greatest handicaps to the real growth of true citizenship will be removed.

Another phase of this, too, is extremely gratifying, when you find that the Women's Alliance is making an investigation of the women wage-workers. In the United States today we have ten million women who are employed in the different occupations. The Women's Alliance of which we will hear something, I trust, before the convention is over, has made it possible to have the condition of many of the workers bettered. We have no less a person to tell us something of the condition in this country than Mrs. Raymond Robins, who, as you know, has been at the head of this movement for years.

Finally, apart from considerations of economic growth and material gain, comes the consideration of industrial education as it contributes toward the ultimate happiness of men and women as individuals. No

nation can become truly great whose people are not in the main happy and contented, and no people can be happy and contented who have not learned the lesson of how to live.

Herbert Spencer says:

> How to live is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to behave as citizens; in what way to bring up a family; in what way to utilize all those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage to ourselves and others—how to live completely. And this being the great thing needful for us to learn, is, by consequence, the great thing which education has to teach. To prepare us for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is to judge in what degree it discharges such function.

Surely industrial education, judged by this standard, is helping properly to fulfill the true function of all education. The development of the faculties of young men and young women, the training of them in lines that are useful and helpful, the inspiration which it offers to those who come within its influence, all contribute to the ultimate happiness of mankind. A useful man is a happy man—happy unto himself and happy unto those among whom he lives. His life is a helpful one, his example is a gem in the jewel box of human achievement. And whether his sphere be great or small, whether his earnings be much or little, every man who is useful has the possibilities of good citizenship within him.

Industrial education has helped to teach men and women how to earn a living and to the extent that it has done this it has contributed to the cause of good citizenship. But even greater than this in its contribution to society must be placed its attainment in teaching men to be happy by being useful, to be contented by being in the possession of developed faculties. And in so far as it has taught men this it has taught them the noblest aim of citizenship—it has taught them how to live.

THE RELATION OF THE ELEMENTARY SCHOOL TO SUBSEQUENT INDUSTRIAL EDUCATION

WILLIAM T. BAWDEN, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

The elementary school has sometimes been made the scapegoat of the schools "higher up." If the college experienced difficulty in turning out a product in all respects satisfactory, it complained of the inadequate preparation of the students sent up to it from the high school. The high school in turn maintained that most of the shortcomings of its graduates were to be ascribed to the inefficiency of the elementary school.

If these apologetic explanations are to be accepted as fully meeting the

situation, they imply as the chief function of the elementary school preparation for the secondary school, and as the chief function of the secondary school preparation for the college, and as the chief function of the college preparation for the graduate school, and so on. The insufficiency and the absurdity of this view have been pointed out in the characterization of our educational system as a "vestibule to a vestibule to a vestibule."

Recent discussion has brought forward certain facts that emphasize the fallacy contained in such criticisms of the elementary school. In the first place, attention is being called to the fact that only a very small percentage of the children who enroll in the elementary school seek entrance into the high school. In the light of the figures the elementary school could not be justified in assuming that its primary purpose is training for the higher schools. In the second place, the aforesaid critics have hitherto failed to appreciate the fact that the students who come up to the higher schools are the result of a process of elimination and selection that weeds out all individuals who do not indicate capacity for adjustment to school requirements.

A great many students of education are centering their attention at the present time on the contribution to social progress that may be expected of our educational institutions. The fundamental question in their minds is: Does education render the highest service to society of which it is capable? The emphasis upon the objective rather than the subjective aspect of the problem should assist in the formulation of principles upon which may be based the reorganization of the elementary school, now recognized as essential.

From this view, as has been indicated by Dr. Elmer E. Brown, the elementary school provides the

> education needed for all; which for the sake of the general good no citizen can be permitted to do without. Beyond this is the region of difference, of divergence, ...

in which it is necessary to begin to provide opportunities for training along lines differing according to the proposed careers of the individuals. Consideration of the questions involved therein is directly responsible for the present widespread interest in industrial education.

The conception that the elementary school is to provide the education needed by all children apparently has led many well-meaning individuals into the unwarranted assumption that the elementary school must offer all the subjects asked for in the name of all the children and must require all the children to study all of these subjects. The result, naturally, is the elimination of large numbers of children who cannot or will not take the dose, on the one hand, and an unnecessarily full program for those who do stay in school, on the other.

I have heard Professor Selvidge say that "it is only because of reverence for the dead that we have our present overcrowded curriculum." With each new movement for reform we have had new subjects added to the list,

but only rarely has anything been thrown out, and not until Professor Dewey's time perhaps have we had it seriously proposed that we break with tradition and thoroly overhaul our elementary-school system.

For years we have had complaints of the overcrowded curriculum, but progress toward simplification seems slow. President Sutherland, of the Platteville Normal School, in an address on "Sources of Waste in Education," after pointing out that the grammar-school pupil is "expected to manifest interest and enthusiasm, between the hours of nine and three-thirty," in from nine to twelve different subjects, says:

> Pupils pursue altogether too many studies at a given time. Their interest is dissipated by too frequent changes from one consideration to another. Concentrated attention is impossible both from pupil's and teacher's points of view, when so many threads or phases of work are simultaneously soliciting the interest.

THE ELECTIVE SYSTEM IN THE ELEMENTARY SCHOOL

It is understood, of course, that the curriculum of the elementary school, as well as of the higher schools, is in a transition stage from that of a period in the past when the only individuals who needed education were the candidates for the learned professions, to a quite different period that is now fully upon us when the need of universal education must receive recognition. The new education must be richer in content and more varied in method than the old. The school cannot hope to meet the situation without material expansion in equipment, courses of study, program, and teaching force.

Since there is already offered far more than any single individual can assimilate, the inevitable conclusion is that the principle of election must have greater influence in the working-out of our plans for elementary education.

It will be objected at once that this suggestion is all wrong, that we ought not to entertain the proposition of a choice of studies on the part of boys and girls in the elementary school. Against those who hold this view the answer is the undisputed fact that from 40 to 50 per cent of the pupils who enter the elementary school elect no studies at all in preference to what the school offers them after fourteen years of age. This seems to show that the elective system is already operative.

Furthermore, it is to be noted that provision for the needs of children who have been compelled by circumstances to make a choice need not interfere with the plans of those children who may postpone such choice.

It is not possible within the limits of this paper to consider the details of a reorganized curriculum and administration. It will be sufficient to suggest two or three lines along which such reorganization may proceed in order that the elementary school shall provide the "education needed for all" and in order that it shall sustain the proper relation to subsequent industrial education.

WIDE-OPEN OPPORTUNITIES

1. In the first place, it must be agreed that the elementary school should sustain the same relation to subsequent industrial education that it does to subsequent professional and technical education, or so-called general education, or to education in the school of experience. Its aim should be the perhaps impossible one of preparation for any subsequent schooling or for immediate wage-earning. It must provide a foundation upon which any reasonable superstructure may be built. The problems of the elementary school will not have been solved until it gives as careful and efficient attention to the needs of the child who goes out into the industries as it gives to the needs of the child who goes on to the secondary school and college.

American institutions are organized, theoretically at least, on the supposition that the only barriers to upward progress are the limitations of individual endowment. Everything must be, as we say, "open at the top." Against this principle the elementary school has in the past been a serious offender, in contributing to the restriction of possibilities in the cases of countless individuals. This it has done by its cultivation of ideals and inclinations in a narrow field, and by its attraction away from commerce and industry toward genteel careers. It has been well said that the practical tendency of our academic education is to prescribe the future careers of the young people who submit themselves to it.

Every individual should approach the time of decision as to his future life-work with an open mind, in possession of as much data as possible concerning prospective occupations, and with as much knowledge as possible of his own tastes and capacity. The opportunities and responsibilities of the elementary school in these respects have never been fully realized.

THE VOCATIONAL MOTIVE

2. Closely connected with what has been said is the proposition, now urged in many quarters, to introduce into the work of the elementary school more of the vocational motive. This involves such modification of the spirit and content of the work as will make its vocational value apparent to the pupils themselves and will definitely raise and attempt to answer questions relating to future occupations.

I do not believe with those who hold that consideration of such questions as these during the elementary-school period means prematurely fastening upon the shoulders of childhood the cares and responsibilities that should be postponed as long as possible. The elimination statistics that have been gathered are the very best evidence that such consideration is not premature. The vocational motive is already in the situation, but it works the wrong way. As it is now, the boy sometimes leaves school because he wants to get a job, and he feels that the school is doing him no good. The school should be so changed that the boy will want to stay in school as long as he

possibly can because he wants a job and he knows that the school will help him.

The appeal to the vocational motive does not necessarily imply the setting of a time at or before which every boy must have decided upon his life-work; tho it is a question whether it would not be an unusual boy who, in a proper school environment, would reach the age of fourteen or fifteen years without forming some definite idea as to his future work. A good deal could be accomplished, without revising courses of study and without new equipment, by a change of attitude on the part of the teachers toward various occupations.

School-teachers must take the lead in recognition of the essential dignity and worth of honest and efficient work of whatever character. If work is anywhere regarded as mean and contemptible it is probably because of the influence of someone who has been taught by the school to regard himself above it. Without question the teacher has done positive harm when she has attempted to spur the restless boy to renewed interest in books by the warning: "You surely do not want to grow up to be a common workman!"

Industrial education has fully justified itself from many points of view, but I believe that in no other single particular is such justification more acceptable or more gratifying than in the changed attitude of young people toward work. More than one student of the signs of the times has protested vigorously against the bringing-up of a generation of young people free from all economic cares and anxiety, without the discipline of daily tasks and responsibilities, accepting more or less consciously the notion that personal daintiness and perfection of attire (admirable as these are) constitute the only reliable and indispensable guaranty of respectability. There is doubtless a good deal in modern social conditions to call forth complaints along this line, but I believe it is possible to discern evidences of a contrary tendency. The successful development of so many forms of industrial education is of itself an unmistakable indication of progress in the right direction.

Whereas it has been alleged hitherto that entirely too many of even those boys who were looking for work were discontented with anything except the "clean" jobs in store, office, or shipping-room, it is now asserted that by the success of the various forms of industrial education that have been offered we "have disproved the theory that the American boy will not go into the trades, and have proved conclusively that if the trade be made attractive the American boy will go into it."

The elementary school must co-operate heartily and effectively with this tendency. It will be obliged, of course, in its capacity of adviser to present the facts with reference to certain callings, but it should present real facts, and it should not temper its presentation of these facts with an admixture of false pride or snobbery.

THE SOCIAL MOTIVE

3. A third respect in which the elementary school should change in adjusting itself to subsequent industrial education is in giving more recognition to the social motive.

In appealing to the ambitions of our pupils we more commonly lay stress on the advantages to the individual of culture, power, and achievement. We dwell on the satisfaction that comes with an education and the ability to appreciate and enjoy the fine things of life. And we do not fail to mention the privileges of association with the elect on a plane above the level of the common herd.

Is it not time now that we turn away from this selfish view of life and in harmony with the spirit of the new age, point out the joys and the reward and the duty of service?

It should be possible to show young people that participation in the benefits of an education provided freely by society entails a commensurate obligation on the part of the individual toward society. But, more than this, it should be revealed to these boys and girls at an early age that the only rewards and satisfactions in this life that are worth while are obtained thru social service. And, still further, it should be made clear that the state is justified in maintaining a system of education solely on the ground that an educated individual is a better citizen than an ignorant one. Education for service, therefore, must be the fundamental motive behind all educational effort.

After one has provided for the necessities and comforts of life there is not much lasting satisfaction in the mere amassing of wealth, or in any other form of activity open to one who is unwilling to be useful to his fellows. On the other hand, one can be truly happy in any sphere, however humble otherwise, if he can have the satisfaction of counting for something in the progress of his social group. These considerations should undoubtedly have a place in the training of young people, and experience with grammar-school pupils has demonstrated that they are susceptible to this motive.

SUMMARY

In brief, I have attempted in this paper to formulate four propositions:

1. The elementary school should sustain the same relation to subsequent industrial education that it does to subsequent education of other kinds: it should afford training leading in all directions that are worthy, with all possible impartiality.

2. In order that the elementary school may fulfill its function of providing the "education needed for all" it must definitely abandon the idea of "one curriculum for all."

3. The elementary school should encourage in its pupils the development of vocational purpose in their efforts toward education. Further, the pupils must be convinced that the school is able to help them discover and define these purposes, and that as soon as these purposes are defined in their own minds the school is prepared to offer practical and substantial assistance in their realization.

4. The school should make more of the appeal to altruistic motives, emphasizing the ideal of education for service.

DISCUSSION

PAUL KREUZPOINTNER, chairman, Industrial Committee, American Foundrymen's Association, Altoona, Pa.—It is a decided gain in educational progress to have presented to this convention one of the most difficult problems to be solved by the educators in so convincing a manner as Mr. Bawden has succeeded in giving us his presentation of "The Relation of the Elementary School to Industrial Education." We men of the industries who are under daily obligation to adjust to their work the material received from our schools appreciate the willingness of the educators to have the elementary school take part in the work of preparing those who are destined to enter industrial life direct from the elementary school.

If we trace the effect of present-day educational endeavor upon the various social forces of our national life, as these forces act and react upon each other, we find that the readjustment of the elementary school in the direction so admirably outlined by Mr. Bawden would benefit society at large even more than the industries would be benefited, because by so doing industrial education would be raised to that higher level of ethical and intellectual efficiency and broader social usefulness which this form of education must eventually occupy in our national life.

If we retain our present conception of the function of industrial education—that it is to be only an instrument to increase output and to furnish the means to a comfortable material existence—then we endanger our civilization by the everlasting appeal to the selfish instincts of the employer and employee, eventually producing a state of mind which will react injuriously upon the industries and society alike.

Those who have the opportunity to analyze the mental attitude of the industrial worker cannot but come to the conclusion that much of the friction and misunderstanding in industrial life could be avoided if our schools would temper their almost exclusive literary or exclusive technico-mechanical education more with such altruistic elements as would be capable of promoting the conception of social service as a mainstay of social stability and civic usefulness.

In the last analysis the welfare of the individual depends upon the welfare of the community, and the welfare of the community will not be fostered where education has hardly any other object than to get all out of the social soil that can be extracted without returning new fertilizing elements in the form of social service and responsible citizenship The conception of the relation of elementary education to industrial education, as presented to us by Mr. Bawden, suggests this broader ground. The readjustment of the elementary school in the direction indicated would also react favorably upon the teachers by improving their social standing and influence in the community, both of which are now often withheld because of the absence of that intimate relation elementary education might bear to the life of the industrial worker.

Thirteen per cent of the total enrolled school population receive a secondary education. Does the education the other 87 per cent receive in the elementary school suffice to do their share of the nation's work efficiently? To give them greater efficiency it is neither necessary nor desirable to turn the elementary schools into specific industrial schools. What objection is there from the pedagogic standpoint to having elementary education serve as a foundation for the cultural needs of the industrial worker, similarly as literary education serves as a foundation for the cultural needs of the professional worker? Are we willing to admit that educational progress concerns itself solely with the education which lies beyond the elementary school?

What is asked for from the elementary school is not specific industrial training, but the infusion and the diffusion of that general intelligence which will serve as much as a foundation for higher civic efficiency as for specific industrial efficiency.

Taking Dr. G. Stanley Hall's *Adolescence* as a criterion we could safely introduce into the eighth grade, with suitable correlation of academic subjects, the teaching of elementary

knowledge of foods, textiles, wood, minerals, metals, and the study of physics. If this would interfere with the preparation for secondary education, would it be impossible to provide ways and means thru differentiation in the grades for the educational needs of the thirteen out of every hundred rather than neglect the other eighty-seven? I am not pleading here for specific industrial education but for that broader general and cultural civic education which should give the industrial worker an insight into the relation of his work to his civic responsibility, the insight of which can be acquired satisfactorily only by active exercise aided by a knowledge of the nature, use, and means of how to preserve one's health and strength, and the material substances wherewith we have to sustain our material and spiritual life, our social and political institutions, and our civilization.

Emery T. Filbey, School of Education, University of Chicago, Chicago, Ill.—I wish to discuss briefly a topic suggested by Professor Bawden, namely, the attitude we may reasonably expect on the part of the elementary-school teacher and how that attitude may best be secured. In discussing this subject we must take into consideration conditions as they are and conditions as we would like them to be. Dr. Judd, in a recent article, has given us a characteristic account of existing conditions. He says:[1]

> The school has in the past given too little attention to the special forms of mental activity which are involved in the application of reading. Pupils have been allowed to go out of the elementary schools with the ability to read, but they have never had their attention drawn to the fact that this ability would help them to acquire the information that they need to guide them in the mechanical arts which they take up as a means of livelihood. The fact is that pupils who leave the school at the end of the sixth grade very seldom help themselves by using the power which they have. This is partly due to the fact that they do not know that there is a body of written and printed material which would be of value to them, and it is partly due to the fact that they have never acquired the habit of carrying their reading process beyond the earliest formal stages. The school ought to show them that there is a body of material other than poetry and literary prose.

Like criticism might be made of other subjects in the curriculum. A great body of valuable material is available in all branches of our industries which may be made intensely interesting to the boys and girls who contemplate industrial careers. The teachers who can best bring this material to the attention of our students are those who are keenly alert to the social and industrial conditions of our time and who have a broad vision of the industrial possibilities of the nation.

Educators are quite well agreed that the first three or four grades of our elementary school are fairly satisfactory. Grades five and six offer a field for common subject-matter but, as shown above, our method of treatment is inadequate. The seventh and eighth grades are commonly thought of as the period of election, one group of students electing the academic, the other the industrial courses. By industrial courses we do not mean the academic plus shopwork or cooking. We mean a certain amount of constructive and industrial work plus courses in language, mathematics, history, science, etc., so organized as to meet the needs of the students and at the same time develop in them the desired "attitude of mind" and "method of thought."

The teacher with a purely academic attitude is not qualified to render the best service to all of the pupils in the fifth and sixth grades; but in the seventh and eighth grades where much should be made of the vocational motive this situation is intolerable. The pupils who elect the industrial courses certainly deserve teachers who have a sincere and sympathetic attitude. Many of our so-called commercial and industrial courses today are failing to accomplish the things hoped for because they are in the hands of teachers who are not in sympathy with the work. They are teachers of mathematics, history, and what not, whose business it is to do poorly, lest they be required to continue doing well a thing they do not care to do. It has been assumed that teachers acquire

[1] *Elementary School Teacher*, ecember, 1911.

the desired attitude, but the experience of the public school does not warrant such assumption.

The teachers of the academic courses are being well prepared for their work in the normal schools; special rural training schools as departments of these same normal schools are preparing teachers for the rural communities. Where are the teachers for the industrial courses being trained? Where are the teachers of the fifth and sixth grades of all of our schools being given the "changed attitude" of which Professor Bawden speaks?

Few of the normal schools of the country are prepared to give their students an adequate insight into the industrial life of our people, or a knowledge of the social conditions under which they work and live. Quoting Professor Bawden:

> The elementary school should sustain the same relation to subsequent industrial education that it does to subsequent education of other kinds.

Have we not a right then to expect the normal schools of the country to prepare teachers of the industrial courses as they prepare teachers of other lines of work?

REPORT OF COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS

To the Department of Manual Training and Art of the National Education Association:

At the Boston meeting of the National Education Association, resolutions were adopted by the Department of Manual Training and Art urging the colleges and universities of America to grant applicants for admission greater freedom in the choice of subjects acceptable for college entrance, and especially urging the recognition as acceptable elective subjects, drawing, shopwork, and household science and art where these are well taught and form a part of a well-planned and approved four-year high-school course. To further the spirit and purpose of these resolutions a committee was appointed which made a report at the meeting held in San Francisco a year ago.

The first efforts of the committee have been to secure and distribute information regarding the practice of the various colleges in this matter, to call attention to the growing tendency toward decidedly more liberal requirements in the definitely prescribed lists of subjects, and to bring to the attention of college authorities the facts regarding the increasing latitude of choice in the elective subjects that may be offered for admission to colleges.

The collecting of this information and placing it where it would be likely to do the most good was felt to be an important step in persuading many colleges to follow the lead of the more progressive ones that already are giving proper recognition to the subjects in which this department of the National Education Association is especially interested.

In carrying forward this program, however, it has been the aim to make the general plea for granting greater freedom to preparatory schools in

arranging their courses of study to fit the local needs and to develop as fully as possible the interests, tastes, and abilities of the pupils whom they serve; for it is confidently believed that wheresoever the importance of this broad principle is recognized by college authorities there is likely to be little difficulty in securing the inclusion in the list of elective subjects effective work in drawing, shopwork, or household science and art.

During the past year lack of funds has somewhat retarded the work of this committee in certain directions, and furthermore the committee is now waiting for a special report from Washington that is expected to give us most complete information regarding important sections of our work. In consequence of these two facts the report of the committee at this time will be a report of progress only, and will be brief. It is important, however, to bring to the Association at this time the facts regarding the colleges now giving credit for drawing, shopwork, and household science and art, and to direct attention to certain tendencies that have been observed during the past year.

THE PRESENT RECOGNITION OF DRAWING, SHOPWORK, AND HOUSEHOLD SCIENCE AND ART IN COLLEGE-ENTRANCE PREREQUISITES

A. At the present time 28 coeducational institutions will accept from boys 2 or more *units*[1] of drawing and 2 or more units of shopwork, that is, 4 or more units of manual training; and will accept from girls 2 or more units of drawing and 2 or more units of household science and art.

The list includes such important institutions as:

University of Chicago	University of Minnesota
University of Wisconsin	University of Missouri
University of California	Indiana University
Leland Stanford University	University of Cincinnati

B. In addition to the institutions referred to above in paragraph "A," 43 more coeducational institutions accept drawing, shopwork, and household science and art in different amounts. The maximum accepted from any one person varies in these institutions from 1 to 4 units, with an average, for the institutes in this list, of a small fraction over 2 units.

The list includes:

University of Illinois	Northwestern University
University of Michigan	Ohio Wesleyan University
University of Nebraska	Purdue University
Ohio State University	University of Kansas

C. In addition to the institutions referred to in "A" and "B," 8 other institutions for men accept drawing and shopwork from an applicant in amounts varying from $1\frac{1}{2}$ to 4 units.

[1] The word *unit* as used in this report means the equivalent of one recitation or two periods of shopwork or drawing each school day for one school year. It equals about one-fifteenth of the total college-entrance requirement.

This list includes:

Columbia University Lehigh University University of Georgia

D. In addition to the institutions referred to, 3 others accept drawing, and household science and art in amounts varying from 2 to 5 units.

E. In addition to the foregoing, 12 other institutions accept drawing and shopwork or drawing and household science and art in amounts varying from 1 to $3\frac{1}{2}$ units.

The list includes:

Cornell University Tufts College Pennsylvania State College

F. Twenty-five more institutions will accept drawing, but not shopwork or household science and art. Six more are indefinite and will under certain circumstances consider some of the subjects dealt with in this report. With this group Harvard University under its new plan of admission should be included; for while no specific credit is given by Harvard for drawing and shopwork, it is true that an excellent record in those subjects, and the power of initiative and the ability to think that may be developed thru them, are all given due credit in a general way by the Admissions Committee.

G. But 62 institutions out of the total of 188 that we have reported give *no* credit for drawing, shopwork, or household science and art.

This list includes:

Yale University
Princeton University
Amherst College
Williams College
Oberlin College
Vassar College
Smith College
Wellesley College
Bryn Mawr College
Mount Holyoke College

A summary of the statistics shows that: 15 per cent of the institutions accept all these subjects and grant a maximum total credit in them of 4 units; 44 per cent accept all these subjects and grant on an average a maximum total credit in them of $2\frac{3}{4}$ units; 50 per cent accept two or more of the subjects and grant on the average a maximum total credit in them of $2\frac{3}{4}$ units; 66 per cent accept at least one of them. But 33 per cent give no credit in any of them.

If, however, these percentages were based upon enrollment it would be found that considerably less than one-third of the students enrolled in the 188 colleges were registered at institutions granting no credit for any of these subjects.

In addition to the data summarized in the statistics presented in this report, the committee wishes to record a number of hopeful tendencies that it has observed during the past year:

First: Speaking generally, the high schools thruout the country appear to have grown into a feeling of greater independence of the colleges than ever before, and today better appreciate the importance of shaping their

courses, and their instruction to meet the needs of their own students whether the latter plan to go to college or not.

Second: The high schools have succeeded in making their position in this matter and their needs better understood by college authorities and by the public than ever before.

Third: The high schools appear to have come into a larger faith, that if they depart from traditions and more effectively cultivate in their pupils purpose, the habit of application, power, originality, and discriminating judgment, the colleges will meet them at least half-way.

Fourth: On the other hand, the colleges appear to have recognized more thoroly the broader functions of the high schools.

Fifth: There has been a decrease in definitely prescribed entrance requirements in foreign languages.

Sixth: There has been an increase in the proportion of entrance credits in which some freedom of choice is permitted.

Seventh: There has been an increase in the latitude of choice in the elective subjects.

Eighth: More generally the college authorities have come to feel that it is both wise and necessary to leave to school men and to state boards of education the full power and the full responsibilities of administering the work of secondary schools.

Respectfully submitted,

Committee
ARTHUR L. WILLISTON
MICHAEL W. MURRAY
WM. C. A. HAMMEL
CLARENCE D. KINGSLEY
EDNAH A. RICH
HELEN LOUISE JOHNSON
CLIFFORD B. CONNELLEY

THE SIGNIFICANCE OF THE INDUSTRIAL ARTS IN THE SCHOOLS

CHARLES A. McMURRY, DIRECTOR OF NORMAL TRAINING SCHOOL, DE KALB, ILL.

The characteristic of the arts and crafts work is manual effort. It consists in directing motor action along typical lines of construction in special trades. We will sum up the grounds on which this motor activity is recommended to the schools.

First: It supplies an educative outlet for the great physical energy of the children. This powerful impulse for activity in constructive work has not always caught the attention of the teacher, but we may be justified in saying that the constructive instinct in children is as strong as the play

instinct. Froebel discovered in play a source of educative power unsuspected before. Constructive exercise may have an equal value. Concentration of school labor upon mental work for the whole time leads the teacher to neglect the physical, but in race development physical energy has ever been conspicuous in many ways, in wars, in industries, and in many phases of national life. The extravagance manifested in athletics in recent years may be due in part to the fact that opportunities for physical activity have largely been cut off in other directions.

Second: Our psychology greatly strengthens the argument for motor action. Our present psychology centers in the statement that every sense impression tends to work out thru a nervous pathway into motor action. The process of education is the process of building up the co-ordination of ideas with muscles thru motor nerves. Children are very receptive of ideas, but they are equally pronounced in their motor reactions. One who observes children will be convinced that the motor action is one of their striking characteristics.

Third: Mastering the difficulties of construction leads on to mental as well as muscular control. The child is getting possession of himself.

Fourth: The right kind of motor training leads to the same kind of healthy physical development as well-regulated sports. One-sided devotion to purely mental pursuits cannot be profitable in the long run.

Fifth: A full equipment of shops, gardens, and other facilities of work for all children is an obvious need of our present life.

Sixth: To sum the matter up, the large problem is, how the child is to work his way into proper relations to the physical world and to the social world about him. Not only thru ideals in books and stories, but thru practical co-operation with his fellows, the child should acquire skillful reaction and social training. A boy working in the shops and gardens will acquire gradually an interest in and respect for carpenters, gardeners, etc. Children thus gain many sympathetic and appreciative insights. The arts therefore lead all studies more directly into the motor world of industrial and social life.

We may sum up the matter by saying, that training in the arts will round out and complete those series of physical and mental activities thru which the child is brought into relation with the world about him.

If the conclusions stated above are justified, the great moral value of the arts in the education of children lies in their ability to give an appreciation of our duties to our fellow-men. The business relations of men in shops, fields, and factories, the moral duties of men to each other in financial ways are strongly emphasized. The principles of justice and fair dealing come out clearly and unmistakably. One great field of practical morality today is found in the business relations in the industrial world.

The manual arts are now being emphasized in their relation to vocational training. The industrial arts in schools prepare for vocational life in two ways:

First, by giving variety of motor training and a versatile mental attitude toward constructive problems. They train one to adjust himself to new situations.

Second, by giving a positive experience and knowledge of several typical arts, greatly facilitating the mastery of any particular art when the time comes to specialize. In these two respects a strong course in the manual arts, laid out along the line of a few fundamental crafts, such as joinery, textiles, and bookbinding, will yield a rich culture value to the course of study and, at the same time, a motor training which is sufficiently definite to prepare for a wide variety of special vocations. A high degree of excellence in any art is not obtained by grammar-grade children, certainly not the expert skill of adult workmen. This belongs to those who in the period of apprenticeship and in adult life devote themselves mainly and for years to a specialty.

RELATION OF MANUAL ARTS TO ÆSTHETICS

A close relation is now developing between the manual arts and fine art as illustrated in drawing, designing, etc.

The æsthetic element has been gaining entrance to our school work in several ways, in drawing, of course, but also in literature, in music, in domestic science, and incidentally in many other ways. It is natural for children to introduce some element of beauty into their constructions. It is difficult to see how a controlling æsthetic element can be kept out of the manual arts; first, because the impulse to æsthetic expression is well-nigh universal, and second, because in the productive industries, art as a controlling element is everywhere making itself felt. Most articles designed and produced in the shops, mills, and factories have a marked æsthetic quality, and the more clearly the art sentiment is expressed in these products the more valuable they are and the more desired.

The manual arts must put themselves in harmony with this demand for æsthetic expression now so dominant in the industries.

In this sense the manual arts as now being introduced and worked out in the schools may have a highly liberalizing influence upon education.

The desire for skill, efficiency, and finish in workmanship is closely allied to the æsthetic instinct. The projection of æsthetic ideals into common industrial products will slowly lift all the grades and crafts to a higher level. Those nations are taking a controlling place in industrial activities which show superiority in artistic production of the various fabrics.

One danger of our age is that of materialism and utilitarianism which are not redeemed by ideals. The spirit of art everywhere introduces an ideal quality into the labors of men, and redeems them from the baseness that attaches to the merely material. All of our trades and crafts, so far as our system of machine-made products admits, should be raised to some

æsthetic standard. The faults from which such an infusion of art sentiment would liberate our industries may be designated as poor and shoddy workmanship, ugliness, drudgery, and cramping narrowness in the workman. It would be a blessing to millions of people if, thru the schools, the labors of men and women could be lifted up to art standards. It would also add a strong thought-element of superior quality to the manual arts as school studies. Looked at from the standpoint of artistic design, all of our school arts can be made thought-studies of the first rank, not mere manual and physical dexterities.

In this way, on the basis of a rich thought-content, including design, constructive principles, and knowledge of materials and tools, the manual arts in the schools are brought up to the full thought-standard of other important studies. In this way, we may arrive at a course of study in the industrial arts that has a substantial basis, a rich thought-content, based upon a few simple fundamental human industries, historically developed and deeply interwoven with the progress of human life and thought.

A course of study in the arts will thus relate itself to all the leading thought-studies, not merely as a motor outlet for pent-up muscular energies, but involving also the æsthetic ideals of the race. These are gradually incorporated into the prevailing industrial activities of men upon which our modern progress in social organization is based.

SOME SOCIOLOGICAL PHASES OF THE MOVEMENT FOR INDUSTRIAL EDUCATION

FRANK M. LEAVITT, ASSOCIATE PROFESSOR OF INDUSTRIAL EDUCATION, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

To one who studies the present movement for vocational education, and especially that phase of it which we designate "industrial education," the conviction becomes more and more firmly fixed that its impulse springs from those profound forces which seem to be impelling a general social advance and which are dominated by the desire to secure for the less prosperous half of the population a larger share in the good things of life.

Representatives of this less prosperous half, to bring this about, are working for the establishment of minimum-wage boards, old-age pensions, industrial insurance, employers' liability laws, and adequate education for themselves and for their children.

Representatives of the so-called ruling classes are frequently found to be working for essentially the same ends with the belief that in this way only can be averted a struggle between employers and employed which, wanting a more equitable adjustment of present conditions, may be fraught with grave and destructive consequences.

At all events it seems to be reaching the social consciousness that

individual efficiency and the individual's sense of his responsibility to society must be enormously increased.

In working out the solution of these complex problems there is probably no single institution in which society in general places as much dependence as it does in the public schools. It is becoming evident, however, that an increasingly large percentage of all who are relying on the public schools in the emergency unhesitatingly express the opinion that the ideals of the schools must be modified if they are to play the important part in this social advance which they should.

It is one of the curious things about our American educational system that, conceived in a spirit of socialism so far as its organization and administration are concerned, it has tended, nevertheless, in its subject-matter and in its methods of instruction, to emphasize and to promote extreme individualism. Supported by funds raised by assessment on all the property of the community, and organized in such a way as to make possible, if not compulsory, the attendance of all children, presumably for the common good and as a sure foundation for social democracy, the ideals of the schools have centered the interests of the pupils on individual advance and on the ultimate attainment of conspicuous success in the competitive social and economic struggle rather than on the desirability of giving the largest possible service for the common good.

Perhaps in no phase of recent scientific educational study has the purely individualistic ideal been more clearly seen than in the realm of child-study and psychology. It is not my purpose to state that such activity has been necessarily undemocratic, unsocial, or inadvisable—quite the contrary. It can be shown that psychology has contributed in no small degree to the tremendous advance which education has made during the last quarter-century and that it has helped to bring into the schools the very elements which may be most effectively used in socializing education. So far as it has been worked over into terms of educational method, however, psychology has been distinctively individualistic. While social psychology—group psychology—is such a recent development that its technique and terminology are still in the making, it can hardly be doubted that its influence on public education is destined to be even greater during the next twenty-five years than the psychology of the individual on which we have thus far relied. It will demonstrate that our citizenship as a whole must be taught to have less interest in its rights and more in its duties, less thought for the possibility of reaching eminent position for oneself and more for the desirability of securing the contentment and happiness of the less fortunate.

I believe that the present movement for industrial education has important contributions to make to this socializing of popular education and it is to this phase of the movement that your attention is asked.

It is an oft-repeated statement, but one which must nevertheless be

briefly discussed in this connection, that many educators are strongly opposed to the vocational motive in education.

In a discussion recently published in a leading educational journal is found the following statement of the "bread-and-butter" principle as seen by the classicist:

> In obedience to popular clamor, [they] resolved to replace the literary education, which had held sway for centuries, by a study of exact science. They kept sternly in view the demands of the counting-house and workshop. We will not train the boy's mind, said they; we will pack his brain with useful facts. He shall not think; he shall remember. Strictly cut off from a knowledge of the past, he shall live solely in the present. Thus there will be no waste of force. A full pocket shall reward his industry, and if his head is empty of those general ideas which cumbered his father's, so much the better for him. He will get rich the more quickly.

It seems to me that the distinction here drawn between the "cultural" and the "bread-and-butter" aim of education, with the conclusion that the latter is wholly to be avoided as sordid and mean, has a perfectly natural origin, a brief discussion of which is pertinent to our subject. When these ideals were in the making, the vast majority of students came from those classes of society whose members were economically independent even if not actually wealthy. The pursuit of knowledge for the sake of increasing an assured income, already sufficient, or with hope of improving, financially, a career sure to be rewarded by an adequate living and by social distinction, was very properly considered sordid and unsocial. To use education merely as a means of enhancing one's opportunity of gaining a larger measure of the material things of life, or of controlling and exploiting one's fellow-beings, was indeed justly condemned. The result of such action could only be to increase the gap between the rich and poor, the able and the incompetent, the wise and the foolish, and therefore to disrupt society.

Today, when universal education is our aim, "bread-and-butter" education for the masses of mankind will have exactly the opposite effect, will tend to bring the masses and the classes closer together, to secure unity in diversity by giving each a more genuine appreciation of and respect for the other. So far from being sordid and basely utilitarian, it represents one of the finest ideals which the human mind has conceived and sets forth a philosophy of life which can be fully realized under no other conditions than complete solidarity.

Another important social phase of the industrial education movement is that it is bound to have a profound effect on the whole system of popular education. This will be true whether our traditional schools admit or reject the new forms of education. The conditions of industry are such that the employer can no longer afford to train his apprentices in the old way but must, instead, evolve new methods to meet the new conditions. Training must be had and, if the schools refuse to give it, the privately controlled schools will draw large numbers of the pupils away from the

public schools, thereby greatly reducing the influence of the most potent socializing institution of our times. What seems more probable, however, and what is infinitely more desirable, is that the more vital and direct methods which are being developed in connection with industrial training will modify and immensely improve the methods and ideals of general education. Indeed there seems to be little doubt that this will be the outcome, since vocational training is even now to be found in almost every part of our school system. Great activity is to be observed in the elementary schools where retarded and discouraged children have been brought to see the meaning and the need of education by the utilization of the vocational motive, and have been led, by more interesting and stimulating pathways, to the door of the high school. The high schools have modified entrance requirements and have arranged and administered with wholeheartedness less extended courses for those needing them and have not only shortened the courses but have vitalized them as well by relating them to the possible future vocations of the pupils. Separate schools have been established for those who for any reason cannot be cared for in the vocationalized classes of the elementary and high schools, and part-time and continuation schools and classes have been formed for those who must work while they study.

The present demand for the enlargement of the function of the public school, thru the introduction of industrial education, is but a step in the evolution of this popular institution. The advance has always been brought about thru the efforts of those seeking social ends and the betterment of the people, and, as often, has been opposed by conservatism. In this onward movement it is clear that we have reached a crisis similar in principle to others which have periodically confronted popular education when advance has become imperative and when such progress has been opposed by the ruling interest, whether wealth, aristocracy, or sectarianism. Unless we are to reverse all previous precedents the schools will again widen their sympathies and will receive and instruct a still larger proportion of the country's children, thus greatly increasing their social value.

Another sociological phase of industrial education is its relation to criminology. That industrial education is to have an immense influence in preventing juvenile delinquency is the belief of those who have studied faithfully the lessons taught by the reform schools and penitentiaries. Certainly nothing could be of greater social significance than the reduction of crime and especially crime for which society, rather than the delinquent, is mainly responsible. It becomes entirely clear, as one studies the methods employed in a modern reform school and the records of those who have been discharged from these institutions, that the same kind of training for the boy before commitment would, in the large majority of cases, effectually remove him from the probability of delinquency. When taught the satisfaction of work well done, when made to see that the way thru is

infinitely better than the way around a difficult piece of work, even tho it be rough manual work; when he has once experienced the pleasure of actually carrying his own weight, economically considered, he is far less likely to proceed by the devious ways resorted to by those whose wit has been developed more than their skill. That "joy in work" is no mere sentimental phrase becomes a conviction on carefully observing large numbers of reform-school boys engaged in their somewhat skilled occupations.

It is obviously essential to the stability of society that intelligent contentment prevail thruout the group. One of the purposes of industrial education held, more or less consciously, by its advocates relates directly to the contentment of the masses. To my mind it is one of the most subtle and far-reaching aspects of the movement. That social discontent exists no thoughtful observer will doubt, whether he can assign the cause or not. It has been claimed that the schools are partly to blame because of the false ideals of pleasure which they have engendered. These ideals we are told give undue emphasis to the joys of consumption, the spending of money, and passive entertainment, and ignore almost entirely the finer pleasures to be derived thru creative work or even the sterner joy of useful productive labor.

Our courses of study seem to be so devised that they develop the child to the point where he can enjoy, intellectually and æsthetically, many of the things which cultivated people prize, beautiful surroundings in the home, music, art, poetry, the drama, and travel. This is well, but where such tastes are developed without equal attention being given to the development of ability to secure the means whereby the desires may be satisfied there is brought about an unbalanced condition which frequently leads to the conclusion that money is the one thing needed to secure happiness. The joy of consumption, rather than the joy of production, is the end which they seek, in common, it must be admitted, with American society in general. It is believed that a rational plan of education which lays especial emphasis on the constructive activities will enable many to know the pleasure which comes from such work and to turn to that for some if not a large part of their recreative entertainment, as well as to have a clearer appreciation of the substantial satisfaction which their daily work may yield.

Finally, industrial education is sociologically significant for what it is making possible in the way of collective control, that is control by the community, of the conditions of child labor. It is a matter of social concern that children are now being warped, degraded, killed, mentally, morally, and physically, by their early industrial experiences. It is of immense moment to the common welfare that these experiences are often wholly discouraging and unsatisfying to the young workers, thereby creating or strengthening the belief that work is a curse, a thing to be

avoided as far as may be, and that the prizes of life are reserved for those who exploit rather than for those who serve. Industrial education is so successful in drawing attention to this matter that where such education is an established fact it is much easier to secure the extension of child-labor laws, the inauguration of systems of vocational guidance, the co-ordination of apprenticeship laws with those relating to education and child labor, and the establishment of minimum-wage commissions to fix and maintain suitable rates of compensation for children or minors. All these are of distinct social significance and the accomplishment of them will be impossible without a system of industrial education. In fact a thorough-going system of industrial education leads inevitably to vocational guidance, child-labor and apprenticeship laws, and public wage boards, and will serve to bind them together into a single function.

In the great problem which confronts civilization today, the working-out of right relations between man and man, the "masses" will be the first to accept the conditions of advance and to work and sacrifice for it.

I repeat that, so far from being a narrow utilitarian movement I believe that industrial education allies itself with the broadest and I may say the most spiritual movement of the century, the promotion of genuine brotherhood. Brotherhood is possible only where there is frankly accepted the ideal of unity in diversity.

Unity in diversity; this is also the keynote of industrial education. Its promoters are learning to treat with equal respect and to strive equally hard to administer to the needs of the future factory worker, the future accountant, the future electrician, or the future engineer. And if education learns to dignify all vocational life by giving it consideration in its various forms and relations, who shall say that this will not have a profound influence in helping us as a nation to develop a unity of purpose out of the wonderful diversity of conditions and opportunities which our country affords and of which we are justly proud and which in a social democracy should somehow be made to minister to the common good?

DISCUSSION

William J. Bogan, principal, Lane Technical High School, Chicago, Ill.—Has the speaker made too many claims for industrial education? Is its supposed effect upon crime the figment of a Sunday-school imagination? No. So long as Satan is the chief employer of idle hands, crime will flourish; and when we realize that a prime function of the school is to furnish Satan competition, crime will decrease. The cry of humanity is for work, a cry unheard by the school. A pathetic illustration of the need for industrial training is seen in the letter of a boy convict to his mother written from the prison to which he had been sentenced for life. He was one of five convicted last winter of the extremely brutal murder of Guelzow, the Chicago truck farmer. This boy was not yet sixteen years old and he had known his companions only five days before the murder. But he was out of work—and Satan provided employment. The boy held the farmer's horse while the victim was literally butchered. He writes to his broken-hearted mother.

I am learning a useful occupation here so I'll have something to work at to help you when I get out. [The optimism of youth! He was sentenced for life.] Oh, if I only had something like this before IT happened.

Ladies and gentlemen, the cry of the ages rings out from the heart of that ignorant boy: "Oh, if I only had something like this before it happened." He had capitalized and underscored IT as if to symbolize in a striking manner his awful crime and his terrible remorse: "Oh, if I only had something like this before IT happened." No claim is made that work will prevent all crime but it is hardly necessary to prove to this audience that useful labor is a splendid moral corrective that the schools should use with greater frequency.

The address of Professor Leavitt is particularly pleasing because it helps to counteract one of the usual effects of college domination. I do not mean overt acts of domination but the subtle influence of college tradition carried into elementary and secondary schools by college graduates with a holy and awful respect for everything dead in language, history, art, and mathematics. These young graduates go proudly forth firm in the conviction that they carry the torch of educational progress but, alas, too often they lead their followers into the slough of despond.

The address makes a strong appeal to democratic instincts. It emphasizes a theory held by many that the beneficiaries of special privilege will release their hold on the throat of misfortune when education has fired their imaginations to the point where they recognize the brotherhood of man as a possibility rather than as a mere party shibboleth. True, the ideals of the schools must be modified if this social program is to be made effective. In theory and in practice the schools of a democracy should minister to the needs of all. That they have thus far failed to do so is a reflection on every educational leader of America. Is the time now ripe for change? Judging from the frequent complaints of students and their employers our boasted educational system aims to train for everything —and therefore trains for nothing. Everyone admits the need for change, but few have the courage and the knowledge and the sympathy necessary to face the task of aiding even in a small way the reconstruction of our school system. Our educational system of today reminds one of the condition of the navies of the world immediately after the fight between the "Monitor" and the "Merrimac." Up to that time the backbone of every navy was the wooden frigate, a thing of beauty and a joy forever, but oh, so inefficient. This frigate was manned by sailors who knew and loved every bolt and bar and block and rope from stem to stern and from truck to keelson. After the battle every navy of the world became a museum of junk; every frigate a fit subject for an epitaph; every sailor a candidate for the retired list. Now in place of the rollicking sailor we have the engineer, cold, deliberate, and scientific. He steers by electricity, hoists his ammunition by electricity, aims by mathematics, and fires by pneumatics. We have lost in poetry, but we have gained in efficiency. What is the lesson for us? The sailor who could not adapt himself to new conditions was shoved aside and was perhaps thankful to be given "a place in the sun." Have we the energy, the intelligence, and the sympathy to lead in this new crusade? In the new program shall we play the part of feeble grandfathers content to sit in the sun and croon to the baby while others do the world's work? All say "no" but many act "yes."

The danger to this great movement lies, not in the opposition of reactionaries, but in the friendship of the inefficient. The superficiality of our methods is shown in our chicken-like running to cover whenever a storm of indignation at our inefficiency blows up from the direction of the taxpayer. In a frantic endeavor to ward off criticism, every city in this broad land is going thru the motions of establishing industrial courses—on paper at least—supervised too often by men of slight knowledge and less sympathy. Therein lies the danger. In the process of convincing the world that industrial education is all we claim we must work with efficiency and sincerity. We must become students again. We must go to school to the butcher, the baker, the candlestick-maker. We

must pray for the grace of the open mind. We must place ourselves in sympathy with every sanely directed attempt to improve the social order. The first and second estates have dominated our educational systems from the beginning. Let us now give heed to the cry of the third estate.

C. A. Prosser, secretary, National Society for the Promotion of Industrial Education, New York, N.Y.—I thank the chairman of this meeting and you for the opportunity to discuss some of the points that have been brought out in the excellent papers read by Dr. McMurry and Professor Leavitt. So many valuable things have been presented by them that I hesitate to disagree with any part of their addresses lest their effect be lessened and I be misunderstood.

Dr. Snedden has summarized what I should like to say when he declared that, whatever else we did in vocational education of any kind, we should be certain it was not made a sham or a pretense. There is very great danger that, in the attempt to graft practical education on to the kind of general education which the schools have been giving, the work will be made so academic, so liberalized and culturized that it will fail properly to equip the child to meet the demands of useful employment which thousands of them must meet when they leave the schools.

Two attempts have been made in which the schools have taken part, to give some practical training which it was hoped would fit for successful work in the industries. After the Centennial Exhibition in Philadelphia in 1876, drawing was introduced in the public schools of the country rather extensively. In Massachusetts, drawing was required in evening schools, which it was hoped would prepare for the industries, first in all cities of over 100,000; then in cities of over 50,000; then in cities of over 20,000. Since drawing was one of the tools in trade which every workman must use in one form or another, it was believed that, equipped with it, children and mature workers would become more efficient; but the drawing fell into the hands of the schoolmaster, who did not know life and the industries, and was liberalized and culturized until today no one claims that the drawing given in the public schools of the country, whether in day school or evening school, has played any part in the promotion of industrial efficiency or in advancing the welfare of the worker, which is other than negligible.

In the first burst of their enthusiasm over the new-found manual-training idea it was claimed that boys who had taken the manual-training work in elementary school and high school would receive a basic training in industrial education which would enable them to adapt themselves to all the varied demands of different productive callings. The failure of manual training to realize these claims has been the thing which has brought most discredit upon the movement and most opposition to its further development.

Manual training is a necessary and desirable part of the general education of every American child. It has little, if any, industrial significance as it is given in the American schools. Those who attend the manual-training or technical high school do not take up productive employment in the industries. Too little time is devoted to the training to develop much skill and insight. The instructors giving the work are usually without the experience in the occupation itself necessary to give interest to the boy and reality to the training. The work is carried on in the shop on an exercise basis rather than on the productive basis on which the commercial shop outside, to which the boy himself must adjust himself, is operated. The technical and academic work is not correlated or connected with the shopwork. The shop experience of the boy is not used as a part of his training—as a means of teaching him in the classroom—nor as a means of fixing the instruction received in the classroom thru its application in the jobs or problems with which he deals in the shop. Manual training has not met and cannot meet the need of industrial education. Those who take the work do not enter productive employment, and if they did expect to, manual training is not the sort of education which they need to fit them for their life-work.

There is considerable danger in some quarters that, after having offered two schemes, drawing and manual training, as a means of securing industrial efficiency and failed with each of them to meet the problem, we shall make the third mistake of attempting to secure, thru a few alterations in what is really a manual-training scheme, the same end. There is great danger that school men will attempt to set up a scheme of so-called industrial education as the result of a general theory or philosophy of education from within the schools, when every experience goes to show that the problem can be dealt with, so far as the practical and technical work is concerned, only by first making a close study of what are the industrial conditions to be met and then adapting the training of the schools so that the pupil may be adjusted to the requirements of the employment upon which he must enter outside the schools. This does not at all mean that the industrial school of any kind is for dependents, or defectives, or delinquents. It is for good, healthy, capable American boys who learn largely by doing and who in these schools find their best chance to uncover and develop their taste and aptitude for practical and constructive work, while at the same time they are being properly trained in the things that make for good citizenship and in the related and academic studies which will make them better workers.

I was very much interested in the excellent paper of Dr. McMurry on "The Place of Art in Industrial Education." I agree fully with what he has to say concerning the necessity of developing the æsthetic or artistic sense thru training in the public schools for those boys or girls who manifest unusual aptitude for it and who will find a large use for it after they leave the schools. We seem as yet not to have developed, as some countries in Europe have, any scheme whereby we can give encouragement to those who manifest unusual ability along such lines and who need to be trained for leadership in them.

I do not agree at all with what seems to be his idea that the training which all boys and girls need to fit them for industrial life is a course of shop and classroom instruction in which the larger or dominant emphasis is laid upon the development of the artistic and æsthetic sense and upon its execution in a few carefully devised, carefully worked out exercises in the shop.

Impressed by the crying need of a more artistic product from our shops and mills and factories, one is likely to rush to the conclusion that our deliverance lies in the attempt to develop the æsthetic sense and creative ability of all our boys and girls who go into the industries either as leaders or as productive workers. This might have been true a century ago when under the simpler conditions of life the old artisan trades were followed by well-rounded workmen, each of whom had a chance to put his own individuality and his sense of proportion and beauty and adaptability into the things he made. Modern industry is not so organized. It is probably safe to say today that under the conditions which surround the workers of our day, few of them have a chance to exercise ingenuity and the æsthetic sense and individuality in the making of things save those who are employed as designers in the office of the concern making blueprints which the worker is required to follow carefully.

The question of what training we shall give boys and girls for the industries is largely the question of the group we are dealing with and of where the emphasis should be laid. Undoubtedly those boys and girls who have the artistic sense to such a degree that it represents the line along which they should be trained as their best way out to efficiency and happiness should be given the opportunity to develop it to the full and to be trained in its execution. Undoubtedly all children should have an opportunity while they are going thru the schools, whether they be the general schools giving general education or industrial or trade schools, to have their sense of appreciation of the things that are right and good and true and beautiful developed so that they may be intelligent consumers of the goods of life, so that they may learn to use aright the best things and to enjoy both their work and their leisure. Here again I agree with Dr. McMurry.

But to lay the chief emphasis in the training of the millions of boys and girls who are going into wage-earning occupations upon the instruction which is intended to develop

power of artistic or æsthetic expression would, under the conditions which are found in our industrial life, be as misguided as to attempt to fit all boys and girls for the presidency or for college and professional careers. Let us seek out and develop as effectively as we can, more effectively than we have ever yet done, those children who are to serve us, by lifting and bettering the character of the things we make in industry; but let us not make the mistake of assuming that all children are capable of the development of this artistic sense, on the execution side at least, and let us not lay the emphasis there in the training of the great body of boys and girls who need other kinds of training in order to fit them for the work which they are adapted to do and which they must do as their way out to efficiency and happiness.

The typical boy and girl fourteen years of age leaving the public schools as they do by the hundreds of thousands need either under the roof of the school or in the industry, or in both, practice in the callings which they are to follow under the conditions which the calling sets up that will give insight, skill, knowledge, and power of growth. They need training in the related mathematics, drawing, science, technique, which will make their work interesting and intelligible and lead to mastery and promotion and leadership. They need an acquaintance with the industry as it is carried on, its organization, its administration, its problems, its difficulties, its social and economic place and relationship. With the great majority of these boys and girls the emphasis needs to be laid upon extensive practice in school or shop, along with thinking about the practice, rather than upon the doing of a few things that will bring out an æsthetic and artistic sense and power of execution which they do not possess and which they could not use successfully even if they did possess it, and even if what little they did possess were developed to the fullest extent.

I sometimes fear that in the discussions among school people of the problem of industrial education today we still have our eye fastened upon the fortunate boys and girls who are able to give their time between fourteen and eighteen years of age to schooling, when the great problem in vocational education today is to reach the great army of boys and girls who up to this time, largely because we did not know how to deal with them, have been neglected by the schools. More than 6,000,000 boys and girls between fourteen and eighteen years of age are employed in various ways in this country. This does not include the additional army of children in some of the southern states leaving school at the tender age of twelve. During the present year at least 2,000,000 more childish wage-earners upon reaching the age of fourteen will enter the ranks of industry. More than seven out of ten of this multitude did not finish the work of the elementary school. More than three out of four of them did not reach the eighth year of the schools, and more than one out of two, the seventh year. Almost half of them had not completed the fifth-grade work. Great numbers of them were barely able to meet the test for illiteracy necessary in order to secure working certificates which in most of the states is a test on the work of the fourth grade.

These children not only entered life deficient in the elementary-school education which our day regards as being necessary to the civic intelligence and the vocational efficiency of everyone, but practically all of them had been trained by a formalized process in the things of the books alone, which gave them no opportunity to find what they would like to do and what they were best able to do in life. Practically all of them went to work without proper vocational direction and guidance. All of them found the doors of most of the skilled and desirable industries closed to them until they should become sixteen years of age.

Since they must work somewhere, most of these childish wage-earners find their way largely by accident into low grade skilled or unskilled occupations—the great child-employing industries and enterprises which are always wide open at the bottom to receive young workers but closed at the top so far as permanent desirable employment is concerned. Here because their work lacks purpose and hope they drift about from one

position to another, changing in some states, it is said, from one unskilled position to another on an average once every four months. The resulting moral degradation to the child and the tremendous cost to the employer due to this indifferent, unstable, fluctuating service cannot be estimated. For most of these children the years from fourteen to sixteen spent in wage-earning in store and shop and factory are wasted years, since they find themselves at sixteen in the same position as at fourteen—starting life without any adequate preparation for wage-earning. Their menial, monotonous, more or less automatic work not only gives no skill which will be useful to them in after-years but also arrests rather than develops intelligence and ambition.

Out of the great army of children who leave the schools at fourteen to go to work and get from those schools no further attention, come the ne'er-do-wells, the loafers, tramps, gamblers, prostitutes, and criminals, for whose care the state spends more money in penal and correctional work than it would have cost to have prevented, thru proper vocational guidance and training, many of them from becoming a burden and menace to society.

The ultimate goal of the movement for vocational education is to reach and train properly for their work in life, whatever it may be, the millions of children now going to work at fourteen years of age. Manual training and domestic economy for the regular high-school pupils, technical high schools to fit boys for service as leaders on the business and directive side of industry, trade schools that deal with a selected group of fortunate boys who are able to give four years to preparation for an occupation—all these have their place and deserve public support. But they contribute nothing to the solution of the vastly more important and critical problem of reaching and serving the educational needs of the multitude of children whom we have up to this time neglected, largely because we have not known how to deal with them. From the social and economic standpoint the most valuable contributions to vocational education, and certainly to a wider democracy as well, are being made by those schools which, by opening the doors wide to the child at fourteen years who is able to give all his time to training for some occupation before entering it or by following him with its service to the work upon which he has already entered, are finding out little by little how we can get hold of him and prepare him for his life-work properly—to the end that we may by such experiments come to know as our final goal in vocational education how to "train all kinds of men [and women] in all kinds of ways for all kinds of things."

In his excellent address, Mr. Leavitt touched upon the fact that vocational education was to play a large part in solving the problem of child labor. If the all-day vocational school, which will ultimately attract to itself about one out of ten of the children who now go to work at fourteen, rendered no other service than to hold these children out of the industries between fourteen and sixteen until the door of the skilled and desirable employment was opened to them, saving them for the two years from the deadening effect of the specialized machine, turning them out at sixteen years of age more mature of body and mind to meet the strain of the industry, it would be worth all that it would cost the public for the service that it rendered such children. The part-time school, which, either on the voluntary or compulsory basis, claims a portion of the working day or week of the wage-earner between fourteen and eighteen away from the shop for after-training in the school, is an institution that, by reducing the total number of hours of service during the week of the immature child in the shop, thereby tends to the reduction of child labor.

There are not wanting signs to indicate that in many of the states the trend is toward an extension of the compulsory education law in the direction of sixteen years. To raise the compulsory age law to sixteen and require all children to attend school between twelve and fourteen would be a great injury to many of these children, particularly if they were required to attend schools giving the general or old-line training of the same character as that which they were taking before they left the elementary school and for which many of them have little taste and in which many of them, to say the least, did not make a conspicuous success, and which gives but little preparation of the kind that these children

need for their work. This would necessitate the development of the all-day vocational school between the years of twelve and fourteen to take care of those workers who gave their entire time to the school. Many believe, and I count myself one of the number, that if the compulsory education law is raised to sixteen years of age, it ought to require the attendance of all children under fourteen in the school but should say to the child at the age of fourteen:

You can continue to go to school now or go to work, but if you go to work you must give a certain portion of your week during working hours for the further training you need in order to fit you for the work which you intend to do and at the same time to remove your elementary-school deficiencies.

Compulsory part-time education for children between fourteen and sixteen years of age is coming, and coming rapidly. Personally, I do not believe that any state in the Union is ready to pass such a sweeping provision. We do not have the teachers to give the instruction; we do not know what to do by way of training for many industries; we have not yet learned how to organize our schools to carry on the work in many lines; nor have our manufacturers yet learned how to organize and administer their shops so as to give these children a part of their time away from their regular employment without injury to the business.

We need at the present time such close studies of the needs and possibilities of part-time schooling as that which is now being conducted by the Massachusetts Board of Education and which will be published January 1, 1913. From these we shall learn much about the kind of work we need to give in the school in dealing with different children. While this is being done we need to encourage all sorts of voluntary experiments in part-time schooling between the school and the shop wherever the manufacturers can be induced to co-operate.

In this way we shall learn to deal on a small scale with the great body of our workers, 90 per cent of whom, if they are to be reached at all, are to be reached thru part-time education. The goal of our work should not be the 8 per cent who remain in school but the 92 per cent who go to work. While we are learning by experiment and study covering a period of, let us say, five years, what it would be wise to do, and while at the same time we are preparing teachers in ways which we have not yet clearly seen, we shall be getting ready in an intelligent way to meet the problem of legislation which, based upon the general theory that the state should be responsible for the training of the adolescent child whether he remains in school or goes to work, will require the attendance of all children for a portion of their week upon the instruction which is best adapted to the needs which they present according to their interests, their ability, and their employment.

NEEDED CHANGES IN MANUAL ARTS

FRED D. CRAWSHAW, PROFESSOR OF MANUAL ARTS, UNIVERSITY OF WISCONSIN, MADISON, WIS.

This paper records an investigation running back over four years. It has been my privilege since the fall of 1908 to visit in the capacity of an inspector nearly one hundred manual arts high-school departments in the states of Illinois and Wisconsin. Some of these have been visited twice so that over one hundred visits of an inspectional character have been made by the writer. In May of the present year I was granted a two weeks' leave of absence by the University of Wisconsin to visit eastern schools. Nineteen vocational, industrial, and trade schools were visited.

It is my purpose now to give you the benefit of my observations in terms of needed changes in the conduct of our public-school manual arts work from the beginning of the sixth grade to the end of high school.

This will be done by regarding the visits of the four years as a research. My material will be divided, therefore, into three distinct parts analogous to those which naturally form the divisions in any investigation, viz., that which deals with the data, that which tells of the handling of the data, and that which considers the results obtained.

First, then, I shall give the basis for any statements which will be made upon the needed changes in the manual arts. Second, I shall describe the experiment, which in this case will be a statement of observations of the teaching of manual arts, and, third, the conclusions will be presented, viz., what it seems to me should be done in teaching the manual arts that advantage may be taken of the best methods now being used in manual training, and in vocational and industrial education.

THE DATA

The writer has just closed his sixteenth year of teaching manual arts. The experience of these sixteen years has been gained in all of the consecutive grades from the first in the elementary school to the last in the university. The kind of work taught has been that which is considered fundamental in the educative process and that also which functions as a subject, vocational in character. Under the head of vocational may be listed the teaching of applied physics for prospective workers in power plants, the motive power for which is both steam and electricity, and also the preparation of teachers of manual arts in public schools and industrial schools.

As a preparation for this work the writer completed the course for mechanical engineers at the Worcester Polytechnic Institute, Worcester, Mass. This institution probably, as much as any other, has given rise to many of the methods now used in our industrial and trade schools. Those who attended the Worcester Institute when I did spent ten consecutive working hours each week during the Freshman and Sophomore years in the shop, working with journeyman mechanics upon contract work and under the leadership of a man who had been a foreman in a commercial plant. In addition to this, 168 consecutive working hours of summer time was spent in the shop just succeeding both the Freshman and Sophomore years.

One further item of experience is given to help justify statements to be made farther on. For short periods of time the writer has earned his living as a shophand or as a draftsman.

Further and probably more important data which should be given for purposes of this thesis relate to the visiting of schools.

In 1908–9 and 1909–10 while the writer was connected with the Uni-

versity of Illinois he visited no less than twenty-five of the departments of manual arts in high schools of Illinois. During the past two years he has visited for the University of Wisconsin sixty-nine Wisconsin high-school departments of manual arts. On the recent eastern trip, previously referred to, nineteen schools were visited. With reference to the kind of instruction given they may be classified as follows:

Three colleges, each doing specific technical or vocational work for future tradesmen, foremen, and superintendents, or teachers.
Three pre-vocational schools.
Five elementary industrial schools.
Three large high schools, two of them technical in character.
One continuation school.
One co-operative school.
Three trade schools each doing continuation school work.

STATEMENT OF OBSERVATIONS

In describing the observations made in visiting schools I shall deal with the public schools of the ordinary type first and refer principally to conditions in those in Wisconsin as they exceed in number all others which I have visited.

Usually the construction work of the first four or five grades is given for the purpose of general educational ends. Paper and cardboard, yarn, cord, and raffia, clay and sometimes wood are used in this period as illustrative material and therefore become a means of carrying on more effectively the work of reading, language, geography, and number. To be sure, a certain emphasis is given to technique and to processes, but this lower grade work is regarded principally as a fundamental method in education.

In the upper three grades of the school period below the high school wood is the principal material used, altho in a few places—not more than a dozen, however, of the ninety or more regular schools with which the writer is particularly familiar—light metal, clay, and sometimes cement have a small place. It is a significant fact also that almost without exception the woodwork of these three grades takes the form of what may be called rather formal bench woodwork. By this is not meant that all that is done is the making of exercises, in fact abstract exercises are given only a small place. Small projects are made. They are supposed to be useful when finished. While they may have some utilitarian value, they do not necessarily possess the element of use for the one who makes them. This being true, they must of necessity be made more because the instructor demands than because the pupil desires. A second significant fact is that oftentimes it is very difficult to determine just why articles are constructed. There is little apparent progress made in tool exercises, constructive elements, or co-ordination of muscular and mental effort. This may be due to the difficulty in arranging a course for three consecutive

years so that there shall be little duplication. Be this as it may, the articles made during the early part of this period are usually small and quite impossible of good construction except by those who have had considerable experience. There are notable exceptions to this rule to be sure, but it must be remembered that I am endeavoring to give this observation to portray truthfully conditions in the majority of cases.

In comparatively little of the work which has been seen during the past four years has there been more than a slight consideration given to design, to construction which would compare with that of average commercial standards, or to good finish. I hesitate to say this, because of the exceptions to the rule, but it is unquestionably true that comparatively little of the work now being done in the upper three grammar grades in schools visited is more than average in quality judged from almost any point of view which one may take.

In the high school conditions usually are much better but even here after three and sometimes four years of grammar-school woodwork there is a deplorable lack of really high grade work. For the most part the first two years are spent in furniture and cabinet construction. Very often the article made is one which the individual selects because of his desire for the finished piece. Little regard it seems to me is given to the type of construction or to the grading of articles so that there shall be a progression in elements of design or constructive details. If there is any time when boys should become familiar with commercial shop methods in woodwork it must be certainly in the first two years of high school when they are completing their fourth, fifth, and sometimes sixth year of it. I have failed to find many schools, however, where the atmosphere of the manual arts shop is anything like that of the commercial shop. By this I mean that there is usually exhibited only a small degree of the independence which is the result of a continued and careful consideration of the common details in shop practice; an independence, also, which can be shown only after a considerable period of time, made up of units of three or four consecutive hours, is spent in a particular occupation. In the selection of and planing-up of stock, the laying-out of many similar joints on several pieces, and the assembling of these one finds in observing the work of all the schools in a given territory that only a very few have reached the standard of the most ordinary practice in the factory. In one item alone—the condition of tools—the average high-school manual arts shop is lamentably lax. Again in the finishing of work only a few pupils out of the average-sized class will scrape and sandpaper until the most easily used finishing material will give a good appearance.

I shall not take the time to speak of other lines of shopwork such as pattern-making, forging, machine-shop work, etc., for two reasons: first, because only in the larger cities are these branches taught, and second, because where they are to be found the standards are not very different

from those reached in the woodwork in the same school. I will consider for just a moment mechanical drawing, for it is a part of the regular high-school manual arts for the first two years of the high school, which by the way are the only high-school years uniformly used for the manual arts. Only a very few high schools in Wisconsin offer any line of manual arts beyond the Sophomore year.

For the most part the mechanical drawing may be characterized in one of two ways: either it is merely shop drawing, by which is meant the making of drawings of projects which are made in the shop, or it is a progression of formal exercises in about the following order: line work, a sheet of letters, many sheets of geometrical problems (made, let us note, before plane geometry has been studied), a series of problems in theoretical projections, sections, and intersections, and a few working drawings ungraded as a rule and given with considerable emphasis on the side of machine design rather than on the side of good working or machine drawing to tell properly a shop story to a mechanic. The technique of line, letter, and figure in the majority of drawings is mediocre to say the least.

Now I suspect those of you who are teaching the kind of work which I have been describing are by this time thoroly convinced that I have exaggerated in my seeming denunciation of public-school manual arts. You have said that I have been painting altogether too dark a picture. That I have given it a deep brown in tone, I will admit, but it is none too dark, I believe. At any rating, an unfair arrangement has not been premeditated. Is it not true that when you visit a manual-training center other than your own you go where you know the work is good? Do you not usually go to a school in a large city or do you not see the work put up at some convention where the best of the best is likely to be exhibited? If this is true, you will form an opinion not of the average work done or of the grade of much of all of the work done in a state, but only that of a little of the best work done. What has been attempted is to show, by giving you my observations, the existing conditions in the majority of the schools in one state and in a few in a second state. I have wished to show also the average conditions in the rank and file of the public-school manual arts departments. Bear with me a little longer and we shall have a much more pleasing picture to look upon.

Thus far the older form of public-school manual arts work has been considered. Now I shall refer to the newer form—some type of vocational education. In doing so we must make clear the age of children in a school and the particular type of school. The range in age is the same as that used in the first illustration, viz., from twelve or thirteen to sixteen or eighteen years old. I shall speak of the work done in five types of schools.

First: The pre-vocational school where some specific occupation is taught and by an apprenticeship method.

Second: The elementary industrial school. Here the training for some vocation is not the object of instruction but rather it is to interest pupils and keep them in school

by giving them a sufficient amount of time for handwork which has a commercial outlet Further, interest is secured by making the related academic work correlate with and supplement the shopwork. These two schools form a couplet at the lower age limit of a six-year period of instruction beginning just before it is discovered that children are likely to lose interest in school.

Third: The intermediate industrial school or pre-trade school for children fourteen years of age.

Fourth: The trade school, for boys or girls sixteen years of age.

Fifth: The technical high school.

The fourth and fifth form a second couplet at the opposite age limit in the vocational process of instruction which ranges from about the time of the sixth grade to the beginning of the Junior or Senior year in high school or even to the end of the high-school period. The intermediate industrial school forms the link between the two couplets and consequently the two age limits.

In a series of articles in *Vocational Education* Professor Frank M. Leavitt has described some of these types so thoroly well that I may refer you to his articles for details. I can also recommend the report of the Chicago City Club on *Vocational Education in Chicago and Elsewhere* for a most careful analysis of vocational education and for a division of vocational schools into several types.

I wish now to record generally some observations regarding the work of these vocational schools as I did in the case of the traditional manual arts schools.

In the schools of the first couplet, those dealing with the child of twelve to fourteen, two rather well-defined methods of instruction are followed. In the elementary industrial school each individual gives approximately one-half of his time to shopwork, selected because of its possible future use in an occupational way. Four or five shop subjects are covered in two years, thus about one-half of each year is given up to each of the shop subjects. In wood, the principal material used in the particular school I have in mind, the projects made are not much different from those generally made in regular seventh- and eighth-grade manual arts work. The methods of work, however, more nearly correspond to those used in commercial shops where each workman completes a single project rather than several individual and similar parts of some particular project.

The school day is divided between shopwork and related academic work. The three hours which are devoted to this last class of studies is divided between mechanical and freehand drawing, closely related to the shopwork being done at the same period of time that a particular kind of shopwork is carried on, and to concrete arithmetic and English, and geography and history. These two last subjects are taught together, without textbooks, but with the aid of quantities of illustrative material such as samples of raw and manufactured products, lantern slides, charts, maps, etc.

My observation concerning the shopwork in schools of this type is this: Time enough is given to the work to make it vital; great care is exhibited in the design of each project, its difficulty of construction compared with the ability of the workman, the method of construction, and the finish. The technique of the shopwork is of a high order, that of the drawing not so good.

In the pre-vocational school many articles of one particular pattern are made. Each boy first makes one complete object, then he does a single operation on several similar objects, the work rotating about the class so that each boy in turn performs each operation on several pieces, thus following what I have spoken of as the apprenticeship method. Naturally jigs and forms are used in this work and every effort is made to produce a highly satisfactory completed article in as economical a manner as possible, both as regards the time of the individual and the material used. The repetition of work in job lots develops a considerable degree of skill and a good technique is established. In this type of school three hours are used for shop practice and three hours for regular school work. This is of the closely related type and usually taught to this class of children in segregated groups; sometimes, however, in regular classes with no special attention paid to its relation to the shopwork. Here again, the quality of the work done is good.

The intermediate industrial school is really an elementary trade school. In it boys enter upon the process of learning a trade, following the most approved methods so far as the individual's age and his increasing proficiency in the work will permit. They get just enough of the closely related academic work to make them intelligent workmen in their supposed future occupations. Each boy or girl selects his or her chosen field of work when entering the school and continues in it for two years or until such time, within the two-year limit, as it may be thought best to change an individual to another line of occupational work, providing lack of adaptability to the first line is quite apparent. Good commercial standards of technique are maintained.

The technical high school for the high-school student compares in point of time devoted to shop and drawing activities and methods of carrying on shopwork to the elementary vocational school. Each individual spends considerably more time in the shop processes than he would if he were registered in a regular high school having a manual arts department, otherwise the difference between the two is not great except that the commercial shop methods are more nearly duplicated and the finished product averages much better.

The trade school for boys and girls sixteen or more years of age compares closely in the conduct of courses to the intermediate industrial school for boys and girls fourteen years old. It differs in this particular, that commercial shop methods are more closely followed. In fact in some of

the eastern trade schools one sees a miniature manufacturing establishment. Individuals do everything that it is necessary to do to learn a trade, beginning with the simpler operations performed upon several pieces and working gradually toward the more difficult ones. A change from one job to another is made when the first of the two is correctly done and with some degree of skill.. The academic work here as in the intermediate industrial school is limited to those particular details which have a direct bearing upon the work of the trade being learned. All work when completed must be salable in the open market, consequently it must be standard in design, construction, and finish.

The third division of the thesis is reached:

CONCLUSIONS

We will note, first, some of the most important differences between the traditional form of manual arts as it is usually conducted and the vocational form for similar grades and ages of individuals.

First: From two to five or six times as much time is devoted to the shopwork and drawing in vocational schools as in manual arts departments in regular schools.

Second: The academic work of the vocational school is given less time than in the regular school and is always of an applied type, being taught concretely either by the shop instructor or by some individual who is in sympathy with the vocational plan of intensifying study and treating it from the shop operation point of view.

Third: Boys and girls are segregated in classes which consider only that branch of work which the members of the group may follow as an occupation.

Fourth: Individuals of each sex are given the advantage of vocational guidance so that those wishing a specific training may receive it without loss of time and effort.

Fifth: While different methods of doing work are used in the vocational schools, sometimes resembling closely those of the ordinary manual-training shops and sometimes those of the apprentice shop in a factory, the general conduct of work in the vocational school follows closely general commercial practice.

It is particularly with reference to these points that I suggest changes in the public-school manual arts work. They show unquestionably the dividing line between the old and the new in the manual arts, between the amateurish or the play work and the corresponding work of the adult standard. I cannot subscribe to all the methods and conditions found in certain types of vocational schools for all regular public-school manual arts departments. It doubtless is the feeling of those who are interested primarily or wholly in the educational value of manual training that some vocational school methods look not so much to the interest of the individual boy or girl as to the interest of his or her future employer. Also the manual-training teacher probably believes that the manual arts have long been doing some of the things which vocational education now demands. But it seems to me that teacher, tradesman, and manufacturer alike must agree that vocational education as it is carried on in some schools at present shows clearly conditions which must obtain in the public-school manual training if it is to live up to its greatest possibilities.

We must see as we have not seen before that the manual arts of the regular public school have or may have economic value as well as social and general educational value. For the work of the upper grammar grades and the high school it must become more specialized and less general. The following conclusions have been reached with this general change of conditions in mind.

The needed changes in the manual arts under ordinary public-school conditions as I see them are as follows:

First: There should be an industrial significance given to materials used in the lower grades. This is done in many places especially where handwork is a concrete means of handling the general educational material of these grades. However, there is formality in lower grade construction work quite as much, perhaps, as in other lower grade teaching. Where cardboard construction is maintained merely for the purpose of emphasizing a certain type of motor effort, and where weaving is taught only to instruct pupils in the simpler weaving processes, there is not much or any of the possible general intelligence developed that might be if these materials were used partly at least to emphasize their industrial, economic, and social significance.

Second: In the upper grades more time—not less than two and preferably three times what is now ordinarily given to manual training—must be secured. If it is true that manual arts work should be classed as a laboratory subject and if laboratory work to be placed upon the same credit basis as regular recitation subjects is given twice the time of recitation subjects, then we should expect at least ninety minutes per day for manual arts in the sixth, seventh, and eighth grades.

Third: Besides the greater amount of time in these grades there must be ultimately an opportunity in this period for a certain degree of specialization or better an intensification of effort upon handwork with possible future vocations serving as a guide for selection of subjects. The spirit back of the pre-vocational and elementary industrial school must prevail not in these few and scattered schools but in all schools, for is it not true that in every school the majority of pupils need the vocational either for vocational ends or for an incentive to hold them in school? I need not refer to the many investigations which go to prove this point.

Fourth: In this upper grammar grade specialization we must have much greater effort in the direction of adult standards. By this I mean we should do things not in the "play at it" or amateurish way but in the way men do similar work for which they receive their daily wage. This does not mean that we must lose educational standards in the manual arts of this period. These must be retained. It does mean, however, that we must put our manual training of these grades upon the basis of real work. To do this in addition to additional time we must demand the methods of such schools as the Elementary Industrial School of Cleveland, Ohio,

and the Agassiz Center Pre-vocational School in Boston, Mass. To my mind a combination of the methods used in these two schools is greatly to be desired in all upper grammar grade manual arts work. It seems to me that the trade methods of instruction such as are used in the Rochester Boys' Shop School and the Industrial School in Boston are not demanded in the regular public-school manual arts except in special schools designed for a particular class, as is true in each of these schools and others like them.

Fifth: In the public high-school manual arts departments there must be an opportunity for specialization from the first day of the first year on. In other words, the methods of the best technical high schools and some of the methods of the trade schools must be introduced into all high-school work. As it is now, the first year of high-school manual arts work is not very different from that of the last grammar grade, with respect to any point except that of time allowed for it. The subject is usually bench woodwork and the kind almost a duplicate or a summary of the work of the two preceding years. Look over almost any outline of woodwork for the five years running from the sixth grade to the Junior year of high school and you will find very little difference in methods of instruction or in the class of work done in any two succeeding years. The great majority of boys, and girls too, whom we may hope to see enter high school must see in high-school work something more than that of the traditional type or that which is general only in character. I believe the junior high school is the solution of many high-school problems. In the manual arts at any rate for many individuals the first two years in high school must become finishing years and this means that these individuals in these two years must prepare for strictly vocational service.

Sixth, and last: For those who will continue in high school thru the four years the specialization feature of the first two years is not desirable, at least not in such great measure as for those who will leave high school to go to work at the end of the Freshman or Sophomore year. For all others, however, those who will complete high school but who will then enter some wage-earning occupation the last two years at least must be specialization years. Thus it seems to me that if the high school cannot provide the necessary shop facilities, advantage should be taken of the co-operative plan as it is carried out in either Fitchburg or Beverly, Mass. If cities the size of Fitchburg can successfully operate this plan, it should be a possible one in almost any community.

The theory advanced in this paper is simply this: Give sufficient time to the manual arts from the beginning of the sixth grade on thru the high school to make it vocationally worth while. Introduce methods which will give pupils a real knowledge of work as it is actually done under commercial conditions when these conditions are good and considered standard. Break down, to some extent at least, the pedagogs' standard of sequence of models and iron-clad progression in tool exercises and likewise break

down the standard of a definite sequence of subjects. Why do we require boys to go thru two years of bench woodwork before we allow them to do machine-shop work or enter upon the work of the forge-shop or foundry? Why do we still have woodwork for five or six consecutive years in communities where wood is little used in manufacturing processes but where there may be a great deal of printing, work in textiles, or in cement and concrete? Massachusetts is discovering that work in textiles and printing are both highly satisfactory as manual-training subjects.

My plea is for a change toward greater latitude in selection of subject and closer application to commercial standards—a change which does not mean revolution, but evolution; a change likewise which does not mean discarding the good we know exists in manual training, but rather the retention of all this and the addition of all that is good and practical in vocational education. Such a change means new and continued life for the public-school manual arts and extended opportunities for them to do what may justly be expected of them.

IS THE INTRODUCTION OF TECHNICAL SUBJECTS IN THE EIGHTH GRADE ADVISABLE?

WILSON H. HENDERSON, SUPERVISOR OF MANUAL TRAINING, SPRINGFIELD, ILL.

Before taking up this discussion, it may be well to define the word technical. Webster's *International Dictionary* gives this definition:

> Of or pertaining to the useful or mechanic arts, or any science, business, or the like.

We seem to be agreed that technical subjects should be taught, but we differ as to where they should be introduced. In determining this, I am reminded of a recipe for preparing trout which begins thus: "First, catch the trout." Now we must not do the Simple Simon stunt and expect to catch the fish just where we think they ought to be, but we must go to where the fish are. If we are to introduce technical subjects into our schools where they will do the greatest good for the most children, we must find where the boys and girls are who need this training and take it to them.

Our compulsory school law is based on the theory that a child will enter school at six, complete a grade each year, and by the time he is fourteen will have completed the eighth grade. According to the theory, we should find all of the children completing the eighth grade at fourteen, and if this were so, the close of the eighth grade would be the logical place for the introduction of technical subjects.

The schooling described by the compulsory attendance law is regarded as the minimum education which every child should receive, and it is not until he has this common-school education that the law is willing to release him; yet the United States commissioner of education in his 1911 report says:

It is quite probable that less than half of the children of the country finish well more than the first six grades, only about one-fourth of the children ever enter high school, and less than eight in every hundred do the full four years of high-school work.

The 1911 Bulletin of the Bureau of Education entitled *Age and Grade Census of Schools and Colleges*, by Dr. George Strayer of Teachers College, Columbia University, states:

Omitting repeaters, the percentage of boys in cities of more than 25,000 population, in the entering group who actually enter sixth grade, would be represented by a median of 73 per cent; the seventh grade by a median of 55 per cent; while the eighth grade would show a median of approximately 42 per cent.

In the spring of 1911 the division of education of the Russell Sage Foundation undertook an investigation in co-operation with the superintendents of schools of 29 cities, to secure accurate information regarding retardation of school children. Among the interesting facts revealed are the following:

Of 100 children who enter the first grade, 60 reach the sixth grade, and 25 of them are over fourteen by the time they reach that grade; 40 reach the eighth grade and 14 of them are over fifteen years of age.

Dr. Leonard Ayres' book *Laggards in Our Schools*, which is a report of extensive and thoro investigations of our public schools, shows that of 1,000 children who enter the schools, 272 reach the eighth grade, 145 of whom are over fourteen years of age. Dr. Ayres states that over one-half of the children who enter school leave at fourteen. Thus there is a closer connection between the age of fourteen and the leaving of school than between the fourteenth birthday and the completion of the elementary school. These children who leave school at fourteen are the ones who are the most in need of technical training.

The Illinois compulsory attendance law provides that all children must attend school until the age of sixteen unless the child is between the ages of fourteen and sixteen and is necessarily and lawfully employed during the hours when school is in session. Nevertheless there are thousands of boys between the ages of fourteen and sixteen loafing on the streets in this state. Those persons who have so much faith in the efficacy of a law compelling attendance until sixteen should bear this in mind.

Under the conditions that exist, it is obvious that to reach the children who are the most in need of technical training, we must introduce it in the elementary school. But at once it is protested that we must not shorten the period of childhood, that childhood is a refuge and should be guarded; that fourteen is too young for specialization and a child at that age is not mature enough to choose his career; that it is child labor; that if the child is given skill the factory will claim him all the sooner; that it is contrary to our American principle of equal opportunity; that it is impossible and impractical because 98 per cent of the teachers in our schools are women who have no knowledge of technical subjects; furthermore the pre-

adolescent child has neither the judgment nor the physical strength necessary for this training.

Viewed superficially these may seem to be valid objections but with the idea in mind that the schools are maintained for the good of all the children of all the people, I should like you to consider them in the light of present conditions. First, "We must not shorten the period of childhood. Childhood is a refuge and should be guarded." Childhood should be a refuge where, guided and protected, the child should be taught to protect and care for himself so that when the protection is withdrawn it will not be needed. Childhood is a period of helplessness and during that period many a child comes to school hungry and half-clothed, while the mother washes or scrubs for a dollar a day. Is it right that we prolong that period of helplessness, or should we teach the child something by which he may feed and clothe himself and so relieve the mother?

Then, "Fourteen is too young for specialization and a child at that age is not mature enough to choose his career." This may be true, but we must meet a condition and not a theory. These children are not specializing when they go to work at fourteen, and they have no choice of careers. They must take the work they can get, liking it or disliking it, fitting or misfitting. The boy or the man with no skill or technical training has a hard time making a bare living, but a boy with proficiency in a skilled occupation can choose his own career.

"It is child labor." Does labor cease to be child labor at thirteen years eleven months and twenty-nine days of age? These children do go to work nine hours a day, six days a week, at fourteen, and what we are proposing is to have them work three hours a day, five days a week, under a competent instructor so that when they go to work their labor may be a little less irksome and the pay a little better. The term labor signifies work which is unpleasant or disagreeable to the worker. It gets its significance from the state of mind of the worker. With this idea in mind compare from the boy's standpoint the work that is now done in the eighth grade with what is proposed, and decide which is child labor.

"If the child is given skill, the factory will claim him all the sooner." Remember that the factory is now getting him at fourteen and the law will not allow it to get him any younger. A school which will take the child at fourteen and give him a two years' course leading to skill and proficiency in some occupation will keep the factory from getting him until he is sixteen, whereas it now claims him at fourteen.

"It is contrary to our American principle of equal opportunity." On the contrary it is contributing toward giving every child an equal opportunity. At present the boy who must go to work at fourteen has no opportunity to prepare for the work that he is to do. The child who can remain in school long enough to prepare for a profession has every opportunity. The United States Government will board, clothe, and teach a

trade to an Indian boy of fourteen, and some states and charitable organizations will do as much for a Negro boy, but the only way for a fourteen-year-old child of poor white parents to get the opportunity to learn a trade is to commit a crime.

"It is impractical and impossible because 98 per cent of the teachers are women." If, as some persons think, we have too few men in the elementary schools, this might be a good way to get more of them there. Our schools do not exist for the good of the teachers, and if the welfare of the children requires that more men shall be in the elementary schools, they will be there. To state that it is impossible to give technical training in the elementary school seems folly when there are about fifty schools in the United States that are giving such training to children fourteen years of age, where a majority of the pupils in the eighth grade are over fourteen.

It requires more judgment to do some of the work that is required in the eighth grade than is necessary in many skilled industries. I wish to call your attention to some of the things demanded by the course of study for the common schools of Illinois for the seventh-grade arithmetic:

> Commission and brokerage, different forms of compensation, wages, salaries, fees, commissions. The study of commissions for tax collections, agents' sales, lawyers' collections, and brokers' purchases; stocks and bonds, promissory notes, banking business, bookkeeping, exchange, United States revenues, property insurance, life insurance, the definitions of expectation, level premium, endowment policy, mutual and old-line companies.

From the introduction to eighth-grade grammar:

> In the eighth year a somewhat full study of each part of speech is made. The formal classifications are given, the different uses are reviewed, inflection and the rules of syntax are studied and some time is given to parsing. This involves persistent practice in sentence analysis. . . . . Study gerunds; verbs of the old conjugation, or strong verbs; verbs of the new conjugation, or weak verbs.

From the introduction to eighth-grade arithmetic:

> The arithmetic of this year deals with mensuration. A knowledge of the elements of geometry is necessary. This may be gained experimentally by drawing and measuring, by paper cutting and folding, by applying one figure to another. Simple algebraic processes should be taught as they are needed in the development of formulas.

It seems to me that arithmetic is dangerously near being technical, according to our definition, and that the grammar borders on child labor, and requires fully as much judgment as typesetting or bookbinding, carpentry or cabinet-making. Is there any reason why this mensuration should not be taught by the construction of a real product as well as by paper cutting and folding?

To make a living, a person must have something to sell, that is he must have something, the use of which is valuable to someone else. The person who does not have something to sell in sufficient quantities to receive in return the necessities of life is a parasite on the community. These things which a person sells may be divided into five classes:

1. Intelligence, knowledge, or brains by some other name.
2. Physical strength, or muscle.
3. Intelligence and physical strength combined, or skill.
4. Personal influence.
5. Honor, which includes virtue and integrity.

To illustrate: the physician markets the use of his brains or his technical knowledge. The ditch-digger or the hod-carrier markets his muscle or physical strength; the surgeon, the watchmaker, and the machinist, their skill; the politician, his personal influence; swindlers and girls in vice districts sell their honor.

If the child is to go to work at fourteen or soon after, what can the school give him to sell? In this discussion we must eliminate the last two mentioned, and the first is out of the question as it is impossible to develop a child's intelligence to a marketable degree. Neither can his physical strength be sufficiently developed to demand a living wage. The most advisable course is to develop a degree of skill as it is in the most demand and brings the highest price. The child has both intelligence and strength sufficient to acquire a degree of skill.

As to the manner in which this may be done, I quote from the preliminary report of the Committee on Economy of Time in Education, submitted at the Department of Superintendence during the Mobile meeting:

> In the first place, such expert testimony as we have indicates the presence of considerable waste time and energy in the elementary school. There is a very widespread belief among school men that the fundamental facts, habits, attitudes, and ideals demanded by the general needs of our civilization can be fixed in the nervous system of the children in six school years.
>
> In the second place, the compulsory education law under our present organization gives society control of the child only long enough to guarantee the abler child eight years of general training. It cannot guarantee him the additional years of vocational education required to make him an efficient, self-supporting, and self-reliant citizen.
>
> To shorten the elementary school to six years without impairing its efficiency is to allow two further years of control that will guarantee every child who does not go to the high school some vocational education. In case of those children who are more given to action than to abstraction it is equally profitable to begin to center their intellectual work about an active vocation early. To begin vocational education with its practical life-career appeal, at twelve rather than at fourteen, is to save many a child from truancy and disinterest. It will extend their school life so that they are not too early driven into unprofitable and futureless employments. They will still take up much general training parallel with their broad study of vocational work.

As an illustration of how this technical training may be given in the elementary school, I wish to describe, briefly, an experiment that has been made in Springfield during the past year. Hoping to do something for the boys who now leave school at fourteen and go to work in low grade industries, the board of education furnished two rooms, one with the regulation school desks, etc., and the other with a small but complete outfit for printing and bookbinding. The school in which the experiment was made is on the

outskirts and is in what is generally called a poor section of the city. A printer was engaged to teach printing and was instructed to teach the best practice among printers and to have the boys turn out a good commercial product. A teacher familiar with the work of the upper grammar grades was placed in charge of the schoolroom.

No boys were assigned to the school, but word was sent around among the schools that any boys over thirteen who had completed the first five grades would be admitted. The principals in our grammar schools are just like the principals in other places and they did not encourage good boys who could do good work to leave their schools to go to the "vocational school." Consequently the class of boys who went to the school was not the most desirable. Of thirty-three who attended, ten were under the jurisdiction of the Juvenile Court. Two had served terms in the reformatory. With very few exceptions the boys were "undesirables."

The following may give an idea of the economic conditions of the parents. Ten are miners, two are blacksmiths, two are car-repairers, one is an electrician, and one is a saloonkeeper. A number of the fathers are not regularly employed at anything. Five of the boys are orphans, and two of them stay at the Home for the Friendless. The father of one boy was sent to the penitentiary and the boy had to leave school to help support the mother.

The boys worked in the shop one half of each day and in the schoolroom the other half. The academic work consisted of industrial history and geography, arithmetic, drawing, English composition with especial emphasis on letter-writing, penmanship, and spelling. In the shop, the boys learned to set type, operate the various machines, and do all the work of a printshop. During the year, they did printing to the amount of approximately $400 for the board of education. This was in addition to the exercise work.

A few of the boys were not quite fourteen when they first went to the school but all became fourteen before the close of the year. Of the thirty-three enrolled, ten left to go to work, three of them in printshops at fairly good pay; four moved from the city, and seventeen remained until the close of school. A few left a week before the close so that they might beat the other fellows to the summer jobs. We gave one fellow up as hopeless and sent him back to the other school and the principal expelled him. He was over fourteen and had been loafing on the streets too long.

We found that with the one line of mechanical work, this type of school held seventeen of twenty-eight of our poorest and seemingly most hopeless boys, almost every one of whom otherwise would have left school. We found that it is possible to give boys considerable skill in a very tedious trade. We also found that boys are not bad just because they like to move about and do things with their hands, and we are wondering if perhaps our present system does not make some boys bad.

To summarize briefly:

If the schools are to do anything to benefit the children, they must do it while the children are yet in school. As a majority of the boys and girls leave school before completing the elementary grades, those subjects that are taught in the high school do not benefit them. Those who are the most in need of technical training are the children who must make their living at an early age as only the low-grade industries are open to the unskilled and untrained.

It has been demonstrated that a large number of children can be kept in school for a longer period by making an appeal to the vocational interest and at the same time a great deal can be done toward preparing them for a life in the industries without in any way detracting from their academic education. The placing of this training in the highest grammar grade will furnish the children an incentive to remain in school until they can enter these classes.

Surely any training which will enable a large percentage of our future citizens to attain a higher education, a better livelihood, or a happier existence is advisable.

DISCUSSION

Robert W. Selvidge, professor of manual arts, Teachers College, University of Missouri, Columbia, Mo.—In my judgment the chief difficulty in our manual-training work is that we have no well-defined, conscious purpose. It is useless for us to try to hide behind that blind called "general educational value." When that is the only justification we can give for a subject it is dead and should be decently interred. We cannot justify manual training on such a basis. It must have a "specific educational value." When we can set out these specific values we have a standard by which we can judge our work. As I understand it this is the desire of both speakers. We may differ as to what the specific things shall be but we have made a long step toward the solution of the problem when we try to name them.

The significant features of modern society are industrial and the essential elements in our industrial life are machine and factory production. This points to one of the needed changes in the manual arts. We have been teaching various forms of handwork, in an indifferent sort of way, relying on its "general educational value" to justify us. The ability to do various forms of handwork may be a very desirable accomplishment for the man of leisure, just as music or painting may be, but it has very little industrial significance. If our teaching is to have any direct or specific value we must acquaint the boy with modern industrial methods and processes. A great deal of the manual-training work gives no more insight into modern production than does formal grammar.

I am inclined to think we have too many kinds of industrial or vocational schools. I doubt the advisability of differentiating our schools for children before the age of fourteen. Above that we may give definite vocational or trade training or the student may take the regular college preparatory course. In schools for children below this age we should give them definite information concerning a number of industries with a careful training in some industrial processes. This I would give to all children and I would give enough of it to make it worth while. This is or should be the period for vocational guidance and such work should be of great value in determining the vocation.

The work described by Mr. Henderson is interesting and significant and it seems to me all children in the grades should have the opportunity for such training together with competent advice as to the lines of work to select in the vocational or trade schools which should follow.

I see no objection to the introduction of technical subjects, if you wish to call them such, even below the eighth grade, provided it is understood that you are not attempting to teach a trade but that you are trying to give the boys a clear insight into the actual

working conditions and requirements in the field of industry represented by the subject in order that they may choose with greater wisdom the vocational courses which they will enter when they reach the age of fourteen. An attempt to teach the skilled trades before the age of fourteen will in most cases, I believe, result in incompetent workmen, low wages, and the justifiable opposition of the skilled workmen of that craft.

I have little patience with the "widowed mother" plea that children must enter industrial life at the age of fourteen. Missouri and Illinois have shown the way around that difficulty by pensioning such mothers, who take care of the home, and send the children to school. I might say right here that I fear our social education is more neglected than our industrial education. It will be necessary to give it more consideration before we can proceed far with our industrial education.

In conclusion I wish to say that I stand for an elementary-school curriculum which will give the boy of fourteen the widest possible basis for choosing his line of specialization, whether it be industrial or professional. Let our secondary schools be schools in which children can specialize in the various vocations.

L. L. SUMMERS, director of manual training, State Normal School, Oshkosh, Wis.—We have all been pleased and benefited by the masterly way the leading speakers have treated the subjects under discussion this afternoon. Altho the papers have been presented under different names they treat of the same subject, for without the needed changes for which Mr. Crawshaw has pleaded it would be impossible to introduce technical training in the upper grades of our common schools.

We are all in accord with the general conclusion but there may be some difference of opinion as to the best way to accomplish our aim. Everyone will agree that the public schools are maintained for the purpose of the general education of all the people, that as conditions change our schools should change to meet these conditions. There is now a rapidly growing sentiment that our public schools must do more than this. In addition to providing this general education every boy and girl has a right to demand specific training for some trade or useful occupation.

Are we ready as teachers of the manual and industrial arts to point the way? Mr. Crawshaw painted rather a dismal picture of our achievements up to date. The statements which he has made are all true. Upon whom shall the responsibility be placed? School authorities have been parsimonious in regard to time, equipment, etc. Schools for training grade teachers have given the subject practically no place in their courses of study. Schools for the training of manual-training teachers have placed emphasis on the training of special teachers for high schools almost to the exclusion of training supervisors for the grade so as to make it possible to start manual training when the child enters school. Neither have these schools fostered a close relationship and interdependence between the freehand drawing and design in the schools and the manual-training. In many of our schools these subjects are as isolated as literature and pure mathematics.

I shall have something to say in support of the many excellent ideas given us by the speakers who have preceded me, but before I attempt this I should like to offer an independent suggestion.

The needed changes, as I see them, must be more fundamental in character and must affect every grade in the entire curriculum. The training of the hand, the eye, the voice, the physique is as important as the traditional three R's and should be given an equal amount of time. Some schools have made a beginning, but in comparison to the importance which the subjects deserve our efforts along these lines are superficial and ineffective. By the time a pupil has finished the fifth grade he should have exhausted all the simpler uses of clay given in connection with his nature-study, reading, geography, story-telling, number work, etc., together with some knowledge of pottery and an insight into the industry. The work with paper should follow the excellent beginning made in the kindergarten and should be connected with the regular school work of the pupil in

such a way that each would be strengthened. Beginning with the third grade this work with paper should include the making of booklets in which drawing and design would form a very important element. This last-mentioned kind of paper work should be the forerunner of bookbinding and this training would be an excellent preliminary for those pupils who would finally select bookbinding and printing for their vocation. Weaving, together with the making of a simple loom, should begin in the first grade. This should increase in difficulty as the pupils advance and larger and more complicated looms be made and more difficult weaving attempted. Before the end of the fifth grade, the pupils should be able to make ingenious looms which could be used in the weaving lessons and would also serve to illustrate the history and development of the weaving industry. The other simpler forms of manual training could be treated in the same way. However, the most important form of manual training for these first five grades is work in wood. I speak with conviction in this matter, having experimented with wood in these grades for the past seven or eight years, and I am confident that many of the fundamental operations of the woodworking trades can be best taught before the child reaches the sixth grade and taught at a time when it will do the child the most good from the standpoint of muscular development and control, the standpoint of interest, and the standpoint of the development of his imaginative and inventive faculties.

Mr. Crawshaw passes over the first five grades with the suggestion that the manual training taught should have an industrial trend. Schools training manual-training teachers have practically abandoned this field. I feel that the first five grades are the most important years between the kindergarten and the college, and if I could suggest the needed changes I would plan my course of study somewhat as follows: one half-hour for woodwork, one half-hour for the various other forms of manual training, one half-hour for singing, one half-hour for drawing, one half-hour for calisthenics and two and one-half hours for the various forms of academic work. The academic work and the other forms mentioned would be so closely related that oftentimes it would be impossible for the observer to tell with certainty whether the pupils were having a lesson in geography or clay-modeling, reading or drawing, woodwork or number work. Number experience would take the place of too much number drill. Drawing, clay-modeling, paper-cutting would take the place of so many oral answers in the reading, geography, and nature-study lessons. In short, an effort would be made to develop the whole child and to lay such a substantial foundation that a superstructure in which the academic studies were emphasized or a superstructure in which industrial training would be emphasized would rest equally secure.

How is this goal to be reached? Every normal school must give at least one-third of the time in training its graduates to teach these non-academic subjects. If two years' time is not sufficient then three years should be substituted. Our institutions training manual-training teachers should so change their courses of study that it would be possible to train supervisors as well as special teachers of manual training. The work of the manual-training and drawing supervisors should be planned together so as to make it mutually helpful. Drawing and manual training must begin when the child enters school and must be taught by the grade teacher under supervision, and this most fruitful field of manual-training effort be given the attention which it deserves.

I believe with Mr. Crawshaw that the school should be made to fit the needs of the child. For those children who must leave school before the close of the common-school period a special effort should be made to give them the best possible training. A systematic effort should be made to find out leading occupations into which these young boys and girls enter and then so plan the last year's school work that it will be the most helpful. For those who are only able to finish the common schools the work of the sixth and seventh grades should be of a general character, leaving the last year for specialization.

L. W. WAHLSTROM, Francis W. Parker School, Chicago, Ill.—In the present days of educational doubt and unrest, when all our props seem to be kicked from under us, when we wonder what our next step should be, it would be well for us to heed the injunction of the apostle Paul to "prove all things, hold fast that which is good."

Many questions need to be proved again and yet again; when we think we have finally solved them—lo, they bob up, in a new form. Confusion of terms often leads to misunderstandings. Much of the so-called industrial training of the present day is as academic and divorced from the true spirit of industry as the manual training which it is supposed to supplant, and this, as was so ably pointed out to us yesterday, is one of our dangers of the immediate future. On the other hand, there are at present and there have been in the past many manual-training teachers who have had the right vision and who have been doing effective vocational training for the industries under the guise of the much-maligned term of manual training. Such experiments as Mr. Crawshaw and Mr. Henderson have pointed out to us are much needed at the present day to clarify our vision. Some of them, in truth, are not new but they are the kind that will bear constant repetition.

I should like to paraphrase Mr. Henderson. "If you wish to educate a boy—first catch the boy." This is done by the type of school described, namely, the one in which the technical and vocational aspects predominate. The hook is baited with interest and with this as an incentive the boy will knuckle down to any amount of hard work. Drudgery and drill even become joyful labor under the higher vision of an immediate useful end. He is a producer, an economic asset in his community. He is no longer a parasite. He feels, swelling within him, the impulses which grow and develop into manhood—the power and desire to do things and to have a share in the world's work. It has been to our everlasting discredit that the schools in the past have taken every means possible to crush out this instinct when it appeared in our youth, until, able to stand it no longer, he has been forced into the industry to satisfy this craving for productive action. Here, to the everlasting discredit of the industry, he has been exploited and given a perverted view of life. How much better if the school meets its opportunity and provides the bait which will hold the boy long enough to send him forth into the industry with ideals developed, ready to take his place in the world, and aid in solving the mighty problems of labor.

We want technical subjects or, as Webster has it, subjects "pertaining to the mechanic arts and industries," introduced in the eighth grade and even lower. We want them introduced with higher ideals than are often introduced to the boy in the factory. Too often introduction of technical work has meant the bringing-in of a so-called shop atmosphere, frequently by means of substituting a tobacco-chewing or smoking artisan with no vision or ideals, for the manual-training man.

The Massachusetts Report of 1906 showed that in many cases the factor which determined a boy's leaving school was not an economic or financial one but a lack of interest and faith in the school by both parents and boy. They were merely awaiting the age limit to drop out and go to work.

Many school men if they analyzed the situations in their school system would find their pupils attending school in much the same way as the Roosevelt delegates at the recent Republican convention—"present but not voting," waiting until the convention is over in order to get busy in their own way. It behooves us to look well to our educational machinery; to see to it that we are not boss-ridden by outworn traditions—that we do not use steam-roller methods to iron out the interest and enthusiasm of the boys and girls delegated to our care and rob them of the privileges of education which should be theirs. If we do, we lay ourselves open to the same charge, "Thou shalt not steal." We must apply the eighth commandment to education as well as to business and politics.

THE MANUFACTURERS' VIEWPOINT OF INDUSTRIAL EDUCATION

C. R. DOOLEY, EDUCATIONAL DEPARTMENT, WESTINGHOUSE ELECTRIC AND MANUFACTURING CO., PITTSBURGH, PA.

In these days of progress our educational system is receiving its share of attention. Great improvements are being made in buildings and equipment, in methods of instruction, in the care and improvement of health, systems of organization, and school management, and in adaptation to local needs in specific cases. These developments are good and may be passed with perhaps a single warning against over-systematizing where the system receives more attention than the product.

Concerning this machinery of our educational system the manufacturer is interested largely in but one thing—the practical application of the schoolroom to productive labor.

It requires but a few practical problems to show the real use of a mathematical principle—to show that by a simple calculation the task becomes easier, and time and effort are saved. The student gets a view of his mathematics as a tool—an entirely new thought. He gets a broader view of his work, sees all sides of his problem at once, the possibilities, the limitations, and the relations to other problems. He is working intelligently and he knows it. He is enthused over the great assistance his brain is able to render his hands. He adds to his interest inspiration, and ideals of efficient service begin to develop. He takes pride in his work.

Formal education must accomplish two things; first, it must lay a foundation upon which the student may build as high as he is able without any backward step. Second, it must enable the student to step out into life at any stage of his schooling where either circumstances or his natural limitations call him, fully able to use his mind and body to his best ability. And we might add a third; viz., all students should leave the formal schoolroom, however high they have climbed—graded school, or graduate college—inspired to continue their search for knowledge but fully appreciating that the world will always ask of them, "What can you do?" and never, "What do you know?"

A young man or woman completes a prescribed course and we call it commencement, but the graduate does not get the idea until ten years later. But the boy or girl who leaves school at the fifth or seventh grade never hears anything about this commencement, except as a thing he has missed and glad of it. Neither his teacher nor his text has fitted him for a useful life altho he is very much in the majority.

Just how far down into the grades the things of our daily life should penetrate will probably always be a question and the answers will vary with each locality, but we are generally agreed that at present the change from school life to real life is too abrupt.

The manufacturer is eagerly searching for men who can achieve, and welcomes the modern development which is producing continuation schools and other forms of practical instruction.

However, as important as the machinery of education is, the human element is by far the more important. So far we have made little effort to reduce the classification of student ability to a working formula, but this must be done if our nation is to succeed industrially.

CLASSIFICATION OF STUDENTS

Perhaps the greatest problem confronting the manufacturer is that of getting the right man into the right place. This is also a tremendously important problem to society as a whole, for it means more efficient living, and by efficiency we do not mean more product but less waste.

For a hundred years we have drifted quietly into a pride of our educational system which offered to each and every boy an equal opportunity to become president of the United States, or general manager of a railroad. We have impulsively interpreted this to mean that the educational system should force each boy as near to these goals as possible regardless of his native fitness. The greatest need today is a wise and proper classification recognizing mental and physical limitations as well as special adaptabilities early in life, and then a training suited to each class. There has been far too much of a tendency among the common and secondary schools toward influencing any and all students to take higher educations. In fact, society today adds a degree of respectability to those who go to college simply for their going, and quite regardless of their fitness to assimilate and use the learning placed before them. The result is that today there are many students struggling their way thru high schools and colleges who ought never to have taken our present form of higher education, and who will never be able to make anything like efficient use of their training. Of course this training in one sense has done them no harm, but can society afford this extremely expensive way—expensive in both money and years of life—for a boy to find himself? Would it not be better to surround him thru all his early years with supervision close enough to determine accurately his capacity and then train him accordingly? This will not force into the carpenter's trade him who has capacity to design a locomotive, but rather will make good carpenters of those who would otherwise be shiftless day laborers, tiresome preachers, and starving lawyers. He who has been schooled beyond his ability is more to be pitied than he who is succeeding without a so-called education.

QUALIFICATIONS OF TEACHERS

This may sound like a tremendous responsibility placed upon the teacher but it is only a rational step toward lightening the present responsibility. Does not every mechanic study and know the characteristics of his material

before beginning to fashion a new article? Would he build a bridge of straw or shape a summer hat of steel? Of course there will be mistakes, but how many mistakes are made at present? How many boys have had their initiative and genius of originality dwarfed by forcible conformity to one system? How many men and women, engaged in what we call successful occupations, are really failures because they could have done more for society and have been happier had they been assisted along the lines in which nature best fitted them? Many an excellent farmer has been lost, because as a boy he was sent to an engineering school thru social pressure and is now a very mediocre engineer.

But having made a classification, the teachers must do one thing more, viz., so inspire all students that their lessons unconsciously become vital parts of their lives and not mere dead pages of a textbook to be memorized. This may be a matter of personality which all teachers do not have. They should have it, and those who do not—well, they are in the wrong job, and for the sake of the children, society, and themselves, too, should be removed. Many a first-class clerk, or seamstress, is struggling to make a poor-class teacher. We all suffer for this but put up with it for the sake of a false discrimination in the respectability of various occupations. We are more concerned with what society sees us do, than with how well we do.

It will require teachers of great courage to insist on changes in the form of training for children of well-to-do parents, and it will require a new type of school board to provide the many different kinds of training needed.

Teachers of the future will be most carefully selected according to the same standards, and trained in the same manner, as they will in turn apply to their students. They will further be required to keep in touch with practical life thru regular commercial employment, at proper intervals.

The manufacturer's viewpoint might be expressed briefly as follows: First, the teachers must classify the students according to their several abilities and then train each class accordingly. This training is far more a matter of inspiration and personality than of text. Teachers must get the right boy into the right kind of life-work for him. Second, the students must come to industry thoroly imbued with all the humanitarian attributes that can be crowded into the one word character. They must find joy in service and pride in a job well done. Third, their scientific training should teach them to think independently, thoroly, and quickly, and it matters little if their minds are not loaded with cataloged information which, at best, is uncertain memory. These things must be worked into our educational system if our country is to lead the nations of the world industrially.

MODERN APPRENTICESHIP TRAINING

JAMES A. PRATT, DIRECTOR OF WILLIAMSON FREE SCHOOL OF MECHANICAL TRADES, WILLIAMSON P.O., PA.

In presenting my subject there are a few principles of education which I think it wise to mention in order that the reason for remarks relative to certain courses coming under review may be the clearer. In my discussion I have assumed that a teaching method, giving due recognition to apperception in trade work, is regarded as being of value, and that a definite course content is of a decided advantage, the course to be divided by definite unit periods, and closing in a well-rounded completion.

Apprenticeship is the most primitive educational system known; originally, and as applied in some cases today, its method is purely one of imitation and the content such material as lies nearest at hand, rather than that which best serves in developing the individual along well-defined lines. Teachers must admit that it is inefficient when these important points are realized. The larger business organizations have of late years condemned the simple old-style apprenticeship, not because of shortcomings in method or content, but because the capable journeyman was not developed; yet in many cases we still find apprentices indentured who for the first year do laborers' work, run errands, and are the butt of jokes, and in succession get what may fall to their lot by chance. The number of boys who are poor workmen after completing such apprenticeship is very large indeed. Such is one of the types of training which is still to be found in many organizations, especially those of small size. The larger organizations have in many cases made an effort to improve their apprenticeship training, and developed what is known as a factory apprentice school. This plan gives the boy a certain degree of supervision while at his work in the shop, and an amount of schooling commonly of a technical nature. I am personally acquainted with a number of graduates of at least one such course. Some of them are good mechanics, some are poor. As large a percentage who satisfactorily complete the course are as capable as we find graduating from any other courses, so criticism as to efficiency of training on the basis of evidence in my possession would not be in good form.

There are, however, two serious drawbacks to these schools, considered from the professional educator's standpoint. First, they are decidedly autocratic; only a chosen few can get any consideration as candidates. In the plant which I have in mind, I personally know that a very high type of boy is selected, and usually a correspondingly desirable mechanic is the outcome. It is certainly the private employer's privilege to refuse opening his organization to any boy who may present himself in order that he may have a trial at a trade, when he (the owner) is under an obligation as to training; hence many a diamond in the rough does not even get a glance from the selecting eye. The second feature is the lack of teaching. We find

one man in charge of from 50 to 250 boys and this man has other duties in the plant besides attending to the training of the apprentices; in fact the teaching is a secondary feature. This involves the monitorial system of teaching, that is, an older apprentice teaching a younger, with a lessening of knowledge on the part of the one taught, until his understanding of principles is so limited that he makes an expensive blunder commercially, when the boy is taken in hand by the instructor and the process described is repeated. The drawbacks of the monitorial system are so many and great that I need not discuss it before a body of teachers.

The third method of training which comes to mind is the trade school. Not all schools indenture their boys, but since I am assuming apprentice training to refer to the development of any learner of a trade, these schools are open for discussion under the title before us.

The periods of training in trade schools vary greatly; many such organizations make no effort to fit a boy to earn journeyman's wages, but handle only elementary work; others offer more extended courses, enabling the graduate to earn young journeyman's pay directly upon completion of the work covered. The trade schools, like any other organization, may have faults; they may be the home of "fogyism" and a center for the trying-out of useless personal fads, and errors of omission and commission may go on for a great period of time without interference. One sometimes finds schools where no one takes any interest in improvement. The boy here soon feels that all he need do is put in the time, and get as much fun out of life as possible, which in effect produces a commercial drone who can show but little in the way of training for the money which has been spent on him. On the other hand, there is no organization which is so free to develop the best there is in a boy. All the faults extant in a school are purely matters of choice and not of necessity, because their elimination does not interfere with some other issue at stake which must retain precedence. The trade school is called to teach a trade, that is all, and any board may arrange affairs in such a way that it shall be possible to require a trade school to give a well-rounded training, not being compelled to accept excuses because of interfering factors. In addition to this desirable condition, it is possible to offer a good academic course, which may be completed in the same time that the boy formerly spent in getting nothing but shop training, due to a proper arrangement of his class periods and study hours, and to efficient methods of teaching.

The public support of trade schools has always been regarded as an item of large expense, but as a matter of fact there is no type of advanced school which can be operated at so reasonable a cost, if arrangements are made whereby exercises are of such a nature as to be turned back to the school system for use as equipment.

As an illustration of what can be done in this connection, we have put up at Williamson School during the years 1910–11 and 1912, construction

to the value of $26,747 which at 44 per cent for labor gives us a labor credit of $3,922 per year, and at present the jobbing, allowing twenty cents per hour for labor, demands a credit of $7,165 per year, making a total credit to be allowed for work done as exercises of $11,087 per year. This work was entirely on our own property, and in the public-school system it will be the wisest policy to maintain such exercises on public buildings, since by this means many park pavilions, museums, bath-houses, as well as much equipment for the school buildings may be run as exercises, giving to the community many things which it could not otherwise have; to the boy excellent exercise material; and to the general workman, contractor, or manufacturer, perfect freedom from competition of the school in the general field. There was recently a plea in one of the eastern dailies asking philanthropists to donate this sort of equipment, all of which could be had at small cost, if the city had a trade-school system.

Just at this point, by way of suggestion, I would call your attention to the Fifty-fifth Annual Report of the City of Rochester, where one may find some valuable information relative to methods and per capita cost for the industrial training of boys between fourteen and sixteen years of age.

The co-operative plan of apprentice training is the latest scheme in the line of a system. By this plan the boy spends part of his time in the shop, and part of the time in school; he gets no shop training in the school, covering only classroom subjects here; as operated at present, so far as I know, there is no shop teaching worthy the name being done in any of these courses.

The advocate of the co-operative plan claims that by sending the boy to the business firm he can earn wages while learning, and that it eliminates the cost of shop equipment and material for working, as these are furnished by the firm with which the boy is co-operating. I grant that certain features of a trade can be developed in a shop without a teacher. Among these are the faculty of associating successfully with others, self-confidence, an appreciation of one's true place in an organization, as well as the appreciation of practical reliability; all come to one in any organization more or less intuitively. Briefly stated, this is a kind of rounding out and it is taught to none of us, but gathered by ourselves; it may be more quickly gathered in some environments than others. It is such a line of development as this which may be left to the shop without a teacher. For the best results all other features should have careful teaching; none of the co-operative plans in operation at present give the matter of shop teaching any serious attention. I believe a plan can be adopted whereby some of the benefits due to teaching can come to the boy, the shop be used to a certain extent, and at the same time permit the boy to earn money, if necessity demands it, under an arrangement of one year in the school, fitted with a good trade shop where the boy is taught fundamentals in both theory and practice of trade. The second year let him go to the business firm and

work for just what he may be worth, gathering to himself experience; let him be communicated with and examined from time to time by the school authorities; don't ask the firm to promise any teaching, they won't do it anyway; simply let the boy be paid what he is worth. At the end of this year let him return to the school and take his advanced constructive work and speed practice under proper guidance. From such a course he ought to graduate capable of earning a young journeyman's rate of pay. Let us bear in mind that the boy gets no efficient teaching in the plant; making a school out of a business firm cannot be expected, as modern methods of money-making and good teaching do not travel in parallel paths. If they did there would be no need for trade-teaching systems of any kind, as any boy who wished to do so could find ample opportunity for thoroly learning a trade. During this second year in the shop, however, the boy can earn a much higher wage than would be possible if he came directly from a school where he had received no industrial training, thus enabling him to gather a reasonable sum which would be of assistance to him.

We have now briefly reviewed in a general way the modern methods of training and come to a point for consideration which is worthy the attention of such a body as is present today. I sincerely believe that some effort should be made to equalize the trade-training offered to the youth of the land. I recently made a study of a number of different organizations, in which more than five thousand apprentices are enrolled. These organizations cover all the instruction types which we have reviewed. All these are presented as trade courses and a study shows the great variety of graduates offered to the world. It is a certainty that these men are very different in ability after leaving the courses, and it is an equal certainty that many can give but a small degree of satisfaction as mechanics, due to their very limited training. On the other hand it appears that the apprentice in some cases is spending too much valuable time in getting information which should become his possession in a briefer period. The work of correlating the total period and the apprentice's development is one which is worthy of consideration and if properly carried out will be of benefit to the youth, the employer, and the community.

DISCUSSION

Charles F. Perry, supervisor of industrial education, Milwaukee, Wis.—To discuss the "Manufacturer's Viewpoint of Industrial Education" and "Modern Apprenticeship Training" is to consider an element of most vital import to the employer of skilled labor—namely, his future workmen—from the viewpoint of the employer.

It avails but little to discuss today regarding guilds and the old-time apprentice systems and how boys used to learn their trades. What are the opportunities today for a young man to become a skilled mechanic?

There are, broadly speaking, four kinds of plants in which a young man may learn a trade today. First, the shop which takes the apprentice a definite time, probably four years, and makes no promises of any kind. He must serve and absorb as best he can.

Second, the shop which is willing to enter into a compact with its apprentices and assures them a definite amount of experience on all of the machines in the plant. Third, the plant which guarantees a definite amount of shop experience to each apprentice, plus a certain amount of instruction in mechanical drawing, workshop mathematics, and possibly some instruction in a few of the fundamental laws of physics and chemistry. Fourth, a good trade school.

Of these four different avenues which young men may take today to become journeymen earners in some chosen trade, obviously the employers of the first two mentioned classes have very little if any viewpoint whatever on industrial education. The fourth class, the trade school, is not up for discussion, leaving the third class or the one wherein the welfare of the apprentice is really a matter of concern to the employer.

That it is a vital question is proven by the action taken by an increasing number of corporations and manufacturing plants in giving the subject of skilled help needed in the immediate future concentrated thought and study, in employing expert assistance to plan courses which will draw promising young men to become apprentices, which will retain them thru their period of indenture, and which will permit this to be done at no loss to the employer.

While the subject to be discussed is the "Manufacturer's Viewpoint of Industrial Education," it is evident that in weighing it in his mind the manufacturer must include the viewpoint of the apprentice toward the manufacturer and the opportunities he has to offer. There ought to be and must be mutual concessions. Primarily the apprentice is to the employer as any machine or source of income. He wants the thing that turns out the most work and consequently brings in the largest returns. He is not running his plant for the sake of making journeymen. Without doubt, many employers today will tell us that the apprenticeship system has been a source of deep anxiety to them. Many will frankly admit they are discouraged and accuse the young learners of as much selfishness as they themselves are accused of. Just as soon as many apprentices attain the *savoir faire* of the plant in which they start to learn their trade, even tho the agreement between the employers and themselves has been mutual and not a legal or binding one, these apprentices will "jump" this job and hire out to some other employer, if not as journeymen, then at an advanced period in the understood term of apprenticeship. This "jumping" of apprenticeships is one of the much-discussed subjects at meetings of metal trades' and manufacturers' associations.

In a nutshell, the attitude of all plants to their apprentices with possibly a very few exceptions is one of giving the youth a chance to absorb what he can from his environment. In effect, the employer says to the young man who applies to him for the opportunity to learn a trade, "You may work in my shop and use your eyes and train your muscles, and because I give you this opportunity you must make for me a certain number of each of the things you learn to make." This is fair. These are the conditions under which I served a five-year apprenticeship as machinist and tool-maker, and not once in those five years did my foreman, when he gave me a new job, instruct me how to do it. I was supposed to have used my eyes on other jobs and at the same time attend strictly to the many repetitions I had to make as the weeks and months of my own apprenticeship rolled by.

I consider the apprenticeship course as outlined by several large manufacturing plants and corporations today superior to all other methods excepting the apprenticeship served in a good trade school. The efficiency of the graduate of a modern plant under the third classification depends upon two very important facts, the kind of product manufactured and the quality of the same. The value of the manufacturing plant with the last mentioned apprenticeship system to the community's market of journeymen depends upon the number of apprentices it graduates yearly.

While every possible effort to improve the lot of the apprentice should be welcomed,

it is evident that each modern plant is not caring for any more apprentices than its immediate needs demand; and the number of plants thruout the country having as thoughtful and liberal apprentice courses as commercial conditions will allow are so few, that it is evident that by no means as many worthy young men have the opportunity to learn trades as would like to do so.

The great change which has come over manufacturing conditions in recent years and which has brought us to our wonderful status of specialized departments has made successful apprenticeship training more and more difficult, and the tendency toward specialization is yearly gaining more and more momentum, thus increasing the complexity of the apprenticeship problem.

Aside from the fact of the increasing number of trade schools in this country there will always be the youth who for various reasons—among them, principally, financial pressure to earn—will choose to become a journeyman thru the avenue of the commercial shop.

How can this problem of increasing difficulty of training skilled mechanics be met? Among the list of helpful suggestions which would come in response to such a question there are two which should prove helpful. First, the full meaning of each trade which requires a period of service in order to master its fundamentals should be made clear. The entire outline of each trade in its minutest possible detail should be printed and made available to every youth and manufacturer who wishes this information. Thus the apprentice may see at a glance how he is progressing. It is safe to assume that there are very few shops in each community which offer facilities to master the entire list of fundamentals in any one trade. It will be found that the trade courses as outlined will consist of two divisions—the actual trade or shop practice side and the theoretical part. There should be a night school, possibly in some of the manual-training departments of some of the city high schools, where the apprentices may go to have their questions answered on the "why" side of their trade. If it is found not feasible to have a system of exchange of apprentices from shop to shop, the young men should be furnished with some opportunity to receive instruction in night classes on the practical side of their trade, especially along the line of fundamental parts of the trade not attainable in the shop where they are serving their apprenticeship.

Second, the manual training in our public schools should be such as to reveal each pupil to himself, as to whether he desires to follow the life of an artisan. When we consider the large number of boys who leave school when the law says they may, at fourteen years of age, also when we consider that practically 90 per cent of all the workers in the world's market are earners by virtue of the manipulation of their fingers more or less skilled, and that the large majority of this stream of fourteen-year-old boys will drift into work more or less mechanical, it is vital that the only training that they have had which has tended to develop their hands and eyes be of the kind that has instilled some ideals which will prove of true value in their immediate future.

Lewis Gustafson, superintendent, David Ranken Jr. School of Mechanical Trades, St. Louis, Mo.—My discussion this morning will be limited to certain thoughts that have occurred to me in connection with the papers that have been read. What I have to say will therefore be rather disconnected.

First: There can be no question of the need for systematic instruction in the industries. The organization of trade schools like Williamson and the organization of teaching systems in manufacturing establishments like the Westinghouse Company are in themselves an indication that the conditions existing in modern business are not conducive to the instruction of apprentices. Only by modifying these conditions—by putting the apprentice into an educational environment, that is, into a school, whether it be within the factory or without—can the proper instruction be given.

Second: The aim of the school and the aim of the factory are diametrically opposed

to each other. The school deals with potentialities. Its eye is on the future. It does not ask the student, "What are you?" but, "What may you become?"; not, "What can you do?" but, "What can you be taught to do?" The factory deals with actualities. Its eye is on the present. It asks, "What do you know now?" "What can you do already?" Its main object is a saleable product. Wherever the factory inaugurates an educational department it does so only as a compromise, as a sacrifice of present returns for future gain. The factory school arises because the other agencies (e.g., the industry itself and the existing schools) are inadequate to furnish the training which the future workmen of the factory need. Whenever these agencies shall rise to the occasion the factory school will drop out.

Third: The co-operative plan of industrial training has on the factory side certain serious defects: (*a*) Few men in the factories are competent to teach the shopwork, however well they may know it; (*b*) There is often not only a great lack of interest in the apprentices on the part of those competent to give instruction, but a decided unwillingness to teach; (*c*) The needs of the business, the necessity for turning out work rather than workmen, the fact that the employer and the workmen have not time to teach, together with the fact that the business is often limited in its range, preclude instruction. (Hence the inauguration of shop classes and factory schools, i.e., the segregation of apprentices where they will not be in the way and where they can be taught under favorable conditions.) This is not to be taken as a condemnation of the co-operative plan; but merely as a precaution against certain difficulties.

Fourth: The matter of the proper length of course for trade schools in this country is very much unsettled. Experience would indicate that four years of preparation for a job at the bench is too long, but that three years for the younger and two years for older pupils is about right. The determining question must be, How much of the trade shall you teach? How far shall you reproduce shop conditions? How far shall you endeavor within the school to furnish skill, speed, and experience? There are certain things in every occupation which no school can economically attempt to supply.

The suggestion made this morning that courses be arranged so that the pupil work the first year in the school, the second year in the shop, and the third in the school again has much to recommend it. The rub would be, however, to get the boy, first, into the right kind of shop, and then, at the end of the year, to get him back into the school. Most boys who get a taste of earning money are as hard to catch as colts in the pasture.

Fifth: In the papers this morning, as in the papers at most conferences bearing on industrial education, the emphasis has been placed on the trade school and on education for the trades. This is doubtless because in the trades the lack of proper training is most painfully felt. We must not lose sight, however, of the fact that there are many divisions of industrial training not included in training for the trades and that vocational training is a wider term than industrial. The trade school, the factory school, the co-operative course are all only preliminary steps toward the solution of the problem of how the workers of the country shall be trained to do their work. They do not begin to reach widely enough to answer the demand. Before the demand can be answered there must be an extensive effort everywhere on the part of the public schools. These form the only educational agency that can reach all the people everywhere. Some good work is already being done by the schools. Just what should be done in the future, experiment must decide. Private schools may serve as experiment stations; manufacturers' schools may serve to reveal and meet peculiar conditions; the main task must rest with the schools of the public.

In solving the problem the public school must steer between Scylla and Charybdis, must make early training broad without smattering, must make later training intensive without cramping. It must not make the mistake of forcing into carpentry the lad who might design a war vessel, and it must at the same time see that the lad who would never reach the point of designing a vessel of any kind shall have the chance to become a good carpenter if he so desires.

FRANK H. SELDEN, director, Department of Mechanical Science, State Normal School, Valley City, N.Dak.—From the discussion to which we have listened it appears that the trade school as a factor in education may well be discussed under two topics:

1. What it can do.
2. What it cannot do.

That the trade school has a place and can produce results of value has been so well shown that I think I may well omit a discussion of the first division of this subject and devote my few minutes to a consideration of what the trade school cannot do and possibly indicate a way by which that left undone by the special may be accomplished by the common or general school.

When we have done all that can be accomplished by the special school there will yet remain a large number of boys and girls likely to enter industrial occupations who will not have been reached by our special schools. Can these pupils receive a training in the common schools that will fit them for industry? If this can be done, then there is a task in the matter of trade or industrial training that concerns everyone having to do with the public schools.

From the time the lad of Woolwich Arsenal became the greatest worker of iron of his day, tho he did not learn a trade or attend a trade school, there has been something in industry that boys could get that would insure their success in trade work without passing thru the usual routine of learning a trade. Why could he do this? I think I see the answer in the statement of Samuel Smiles, as he says:

Henry Maudsley had a power of analysis and synthesis that gave him power to master the work so that without passing thru a regular apprenticeship he soon surpassed the old tradesmen.

If this be true, then have we not the key to the problem? Is not the great need of today a training that will give boys this power of attacking the problems of industry intellectually rather than by the tedious process of old-fashioned apprenticeship? I think we could find a few of our modern so-called trade schools actually teaching their work in this manner. Is not the great need a constantly increasing number of Henry Maudsleys who are able to apply great principles to the problems of the shop? Is not the one class of boys that is really in great demand those boys who are adaptable and teachable and who have the power of meeting and readily conquering new problems?

How are we to accomplish this? By teaching in every school the science of which Henry Maudsley was the first great teacher—the great principles that underlie the working of all solid materials. Can this be done? If, as Mr. Smiles asserts, Henry Maudsley could teach such eminent mechanics as Joseph Whiteworth and Joseph Clement in his shop school, is it not reasonable to suppose that with all the advance of a century both in the knowledge of this science and in methods of teaching we ought to be able to teach this science in our school shops at this time? Can anyone who is familiar with the life and work of Maudsley and his pupils doubt that there is a science of working solid materials that can be taught and that leads to exceptionally proficient workmanship? Is it likely that there is any longer a valid excuse for teaching the craftsmanship of a bygone age?

When we take up the teaching of the science of working solid materials and make it a part of every school course because it is of exceptional value as a part of a liberal education, then there will be no occasion for teaching trades except to those few pupils who may, by some slip of fortune, miss the usual opportunities of the common school.

When this is done we no longer shall be obliged to ask pupils what they expect to do after leaving school, for then every pupil may study the science of working solid materials as a part of a liberal education and on leaving school know that he has the necessary qualifications to make good in any line of industry in so far as a school is necessary to insure success. I think the manufacturers will much prefer the boy who has the broad foundation and is capable of learning the special details of a trade quickly and well to the one who is only trade trained.

Some may say I am talking only theory. Let me assure you that any who wish can have very positive proof that this is not theory. Those who will search earnestly can find traces of this science being taught in many schools, sometimes only across the hallway from another shop class where it is absolutely unknown.

The sole reason why it has not become more generally a part of school work is that those who are in position to determine the subject-matter of our school courses are prone to class all school shopwork as of the same nature and especially do they fail to see the great differences that exist in so-called educational manual-training courses. There is too much looking at shopwork in a general way, too much determining of policies and courses on casual inspection and general information.

And now in closing, without taking time to elaborate these statements, I wish to suggest that instead of expending so much effort in establishing trade schools, in the splitting asunder of America's most distinctive and most democratic institution we search diligently for the better elements in our present school shopwork and develop this work to the science that it may be and ought to be. We shall then have the higher grade of mechanics that must necessarily follow the teaching of this science and also the even greater blessing of an undivided system of schools for all.

H. E. Miles, of the National Association of Manufacturers, Racine, Wis.—The trade schools offer no adequate solution. I believe, however, as much as anyone in the splendid work they are doing for a very few. With all the fuss and effort of thirty years, from 1881 to 1911 there were established in this country only ten trade schools with an average attendance of less than 150, often not over 100. Two or three have been added since. The total regular students are fewer than 2,000, or about the same as the number in the continuation schools, at the end of the first or second year of their establishment, in Cincinnati alone.

The average maintenance cost per pupil per year is from $180 to $300, to which has to be added the personal expense of the students, they having little or no earning capacity during the school term. The average output in graduates is about 700: think of this: only 700 out of a population of ninety millions, and a school population of twenty-five millions, and tens and tens of millions at work in our industries.

Furthermore, the graduates of the trade school are so well educated and skilled that very few of them remain as journeymen: they rise thru the journeymen's positions to places as foremen and superintendents, and of leadership often unrelated to their trades.

CONTINUATION SCHOOLS

There must underlie and be closely affiliated with our few trade schools a vast number of continuation schools wherein children by the hundreds of thousands will support themselves by about five days of work per week with a half-day to a day of schooling that interprets the work of the other days; and of part-time schools, still more thoro and of higher accomplishment. From these two and other like schools, our trade schools some day will gather the cream of the product, and make, not the superior men they now make, but men still more capable, and trained directly for the highest positions of leadership and industrial development.

PRE-VOCATIONAL COURSES IN ELEMENTARY SCHOOLS

We must also have pre-vocational work in the elementary schools with an appreciation of the cultural and educational value of industrial work. In other words, especially for the great body of concrete or hand-minded children in the seventh and eighth grades, with some similar consideration for those still younger, recourse must be had to pre-vocational studies, which have been shown in recent years, in many cities, to be of infinite value in brightening up the so-called retarded children, in developing in them such virtues as concentration, love of work, respect, and ambition, and the ability actually to do the

problem in mathematics, etc., that they cannot do in the abstract lessons of the printed page.

OUR CHILDREN NOT EDUCATED

Half of all the children in the United States quit school by the end of the sixth grade. Only one child in three finishes the eighth grade; only one in five enters the high school; only one in thirty finishes the high school.

The new conception, then, concerns the educational salvation and direction of this 50 per cent of the child life of the nation, the children of today, the adult, controlling, responsible life of tomorrow. An infinite mistake is committed in the failure to educate, in any sense, more than half of the population. We are wasting the human resources of the nation, infinitely our most precious possession, estimated by the way, by Professor Fisher of Yale, to be of the money value of $250,000,000,000 and five times the total value of all our other resources combined. Proud as we are, we have done the relatively little thing in developing our physical resources. We must now do the infinitely greater thing—develop the citizenship, make of each child the best possible, the most efficient and valuable social unit, for his own sake, and for the sake of the community and the state.

ADOLESCENCE

Another loss lies in the loss, except under the criminal statutes, of all control and direction by the state of its youth in the period of adolescence, say from fourteen to seventeen years of age. This is the critical time of life, when the will asserts itself, the impulses of maturity are felt, and when, as is recognized by all countries educationally more alert, the developing character needs guidance and cries out for it, for the establishment of standards, for interpretation, and for the strengthening and development of judgment.

Germany, France, Belgium, Austria, Switzerland save and infinitely strengthen and develop the manhood and efficiency of their people, by retaining an educational control thru these years.

CAPITAL AND LABOR

Today our factory children look upon a shop too much as upon a jail. There has developed among a considerable part of the adult factory workers a dislike, almost a hate for work. Substantially all of our native-born factory workers are the boys who left school in the sixth grade, just grown up. They have had little education except that of the newspapers and the chances of the public platform and the street.

Industrial education rightly includes courses in civics, in social rights and responsibilities. One-half of the trouble between employer and employee, between capital and labor, so called, will disappear when our workers have the education to which they are entitled, and better understand what are their rights and how to secure them; what are their obligations, and how to observe them.

CITIZENSHIP

In abandoning, educationally, during generations, one-half of the growing population in mere childhood, the American state has put itself in real peril. For various reasons no vital hurt has come, but now, with every citizen fast coming to feel and assert his equal power, it is beyond question that every citizen must be informed that he may give and take, in reason and with understanding. It will not be enough to have good workers; there must be everywhere a high and intelligent standard of citizenship.

AN INDUSTRIAL NATION

We have become an industrial nation. Each year shows a less percentage of population on the farm and a greater in the cities. While our exports, so-called manufactured, are large, 56 per cent are exceedingly crude, like lumber, flour, and petroleum. We used to speak of our "limitless natural resources." We now see that under present processes these resources will be exhausted within a short time. We export cotton at 14 cents a

pound, and buy it back in fine linen at $40 a pound. We export bar iron and re-import it as razor blades. We export hides and import gloves. We export copper and import art bronzes. We must acquire greater skill to the end that our exports shall carry the maximum and not the minimum of high class labor. Industrial education, first of all, is for the entire citizenship, and secondly economic; humanizing thru the industries, thru the day's work and as part of it.

The National Association of Manufacturers has taken an advanced and comprehensive stand upon this subject. I shall be glad to send you, upon application at Racine, Wis., its interesting and instructive report upon it. The association also earnestly desires the criticisms and advice of educators to the end that its efforts be helpful and well directed.

In the open discussion, FRANK H. SELDEN, of Valley City, N.Dak., took the floor to reply to a statement that he was in error in regard to superior intelligence of our high grade mechanics. Mr. Selden said in part:

I do not claim that we are competing with Germany in all lines of manufacture; we are skimming the cream of the world's trade; we are selling abroad those things that require a knowledge of mechanical science in their production, and buying, in return, those things that depend upon craftsmanship and the cheaper forms of labor. A prominent American jobber in tools and machinery of all kinds stated that, altho his firm purchased tools and supplies of every nation that has such things to sell, the only tool that they find advisable to purchase of Germany is the little German bit. The jobber also stated that the reason Germany could compete in supplying the bits is that manufacturers in other countries having plants and capital large enough to do such work could find some more profitable line of manufacture.

The Germans themselves recognize the Americans' superiority, as shown by German purchases of high grade machinery. One large manufacturer of machine tools, in equipping a new plant in Germany, purchased every one of his high grade machine tools from the United States. Other data in regard to this fact may be found in an article published in the *American School Board Journal* of July, 1911. The Germans are imitators rather than leaders, and, therefore, altho this question of trade is in some respects secondary, it in reality touches a fundamental principle. For whether we look to Germany or to ourselves for our ideals of industrial education will determine very largely whether we develop a race of imitative mechanics to do the cheap grades of manufacturing, or a nation of individual, original, and progressive mechanics who will give our manufacturers power to skim the cream off the world's trade.

Another case in point is the fact that an American saw manufacturer has been able to drive German saws almost entirely from the German market to their own better class of mechanics. A most careful search in regard to the condition that brought this about showed very conclusively that the reason for the German and English manufacturers' not holding their home trade was that neither nation had studied the saw scientifically, thus forcing the conclusion that the American is no doubt far in advance of any other nationality in his knowledge of the science of working solid materials.

It is, therefore, evident that our problem is not to follow Germany in her plans, based, as they are, on imperialism and craftsmanship, but to develop in this republic a line of industrial education that will produce the scientific mechanic. We should strive to maintain our place as a manufacturing nation by educating our mechanics to produce those things that require the highest type of mechanical intelligence and also to maintain an American standard of society and living.

DISTRIBUTION OF INCOME, $500, $1,000, AND $2,000 PER YEAR FOR FAMILY OF FIVE

MARY S. SNOW, SUPERVISOR OF HOUSEHOLD ARTS IN PUBLIC SCHOOLS, CHICAGO, ILL.

In a meeting of so seriously intentioned a society as the American Home Economics Association, no subject, with the sole exception of pure foods, has a right to a larger space on the program than the one which we shall discuss. With several government volumes already recording the findings of the Committee on Research into the Increased Cost of Living, and with ex-President Roosevelt throwing it out as a lure and a promise that he will bind himself to do the same thing, his promise leaving the implication that having discovered the cause he will immediately remedy it, it is meet that women in every part of the land shall seriously study how they will spend the wage so hardly come by on the part of the wage-earner—that the wisdom and skill in the spending shall match the earnestness and zeal in the earning.

It is time that women definitely discussed the actual value of a loaf of bread in terms of flour, labor, and fuel, and compared the result with the price paid by consumer when ordering by telephone, delivering by wagon (special and hurried), wrapping, bookkeeper's time for the account, and other expense accessories are added. Whether or not we shall have co-operative bakeries, laundries, groceries, and markets, should enter into discussion of this subject; whether or not larger appropriation of money and longer time should be given in the public schools to training in housewifery, also belongs in the argument; but most of all should come the evangelist who shall have the power to awaken all women to the appreciation of the fact that the labor and strain of the husband in earning any one of the stated incomes should be met by similar earnestness and expression of power on the part of the woman in the spending.

Women are the spenders of most of the money that is earned. The laborer who gives the wife the pay envelope on Saturday night knows this well; so does the wife to whom, in the spending of the same, with all our theories of percentages, food values, and textiles, we have little to impart, so deeply has life driven the lesson. She knows very well what can be realized from chuck, brisket, and plate cuts of meat. The teacher of household science must gather her classes from a higher social stratum before she will find real ignorance on these subjects. It is true that she can teach them little charms of preparation and serving which they prize and have joy in taking part in, but the keen wisdom in marketing which poverty has forced upon them has many a lesson for the expert teacher.

Students of theoretical budgets have worked out many elaborate schemes of ideal divisions of income, which, after all, are a generalization

from the experiences of the race, and not in any respect original discoveries of methods by which clothing may be increased by diminishing rent cost or food. All income distribution must in the last analysis base itself on the unit and not the family, and the unit has come to be accepted by all economists as the man, the woman being estimated as 90, the child from eleven to fourteen as 90, the child from seven to ten as 75, the child from four to six as 40, and the child of three or less as 15. A family, therefore, consisting of,

Husband	Boy, 7
Wife	Girl, 5
Girl, 12	Boy, 2½
Boy, 9	

should be considered, as computation of food needs, as 4.85 men. This will concern only such as elect to consider these incomes in a severely academic manner. Since the intention of this paper is rather social and observational, this consideration is left to the speaker who follows.

Information for this discussion has been gathered from many sources, including governmental researches, Mrs. More's admirable work on *Working Men's Budgets*, settlement researches in eastern cities, the very valuable reports on *Chicago Housing Conditions* by Miss Breckinridge and Miss Abbott, some very naïve and interesting data furnished by New York public-school children thru the efforts of an exceptionally valuable principal, and work done by the household arts pupils in Chicago high schools. The information and conclusions of the trained social workers are reliable and workable, they having sifted, preserved, and recorded the matter necessary for generalization. The data and conclusions of the elementary-school children and the secondary-school pupils are valuable for the illuminating glimpses of the home feeling and attitude toward the life struggle—as, for example, under the heading of amusements, at least one-fourth of the girls state that the girl (16) and the boy (12) must earn their own money for themselves and a girl (9). This computation is made with delightful cheerfulness and no expectation of failing of sufficient diversion. Extensive explanations are made as to why larger allowance is made for the clothing for the girl than for the mother, the implication being that this fact is damaging to the girl's character unless she makes it quite clear that the condition is temporary.

It was very marked that the girls who came from homes of small incomes had vastly better judgment in the value and distribution of money. There were but three pupils of the number who estimated constant hired service in the $2,000 income, and but 20 out of 870 girls who estimated occasional hired service (like washing). Not any girl included any hired service in the $1,000 or $500 income. Very few omitted savings as an inevitable apportionment in the $1,000 and $2,000 incomes, and more than half of the number included insurance in all three types.

The $500 income instantly became the center of interest, since the members of families of this group rarely reach high school; never, unless they are in some way self-supporting. They needed to be constantly reminded that thousands of families are living on that and less. It then became a problem carrying its own satisfaction in academic solution. It seemed to them, as it does to most people, that in the United States with its comparative freedom from caste and inherited privilege, and its half a fruitful continent to feed a nation, that it should be impossible that "10 millions people are sunk in poverty, 4 millions of them in receipt of relief"—at any rate we are so informed by no less an authority than Robert Hunter. Half a million laborers in Illinois alone earn an average of $575 each in a year, provided they are employed every working day. The vast number earning below $500 who create this average is appalling to the social worker and should be startling to those enjoying the grace of comfortable incomes.

In the consideration of all the incomes, the ordinary distribution has been used of food, rent, fuel, lighting, clothes, sundries.

In a carefully compiled government study of 65 average families, husband and wife and five children, the following figures resulted for the year:

Food	$193.76
Rent	86.31
Fuel	23.90
Lighting	3.69
Clothing	54.18
Sundries	92.16

The item of sundries includes insurance, which most of the families maintained; church, to which many of them contributed; the doctor, schoolbooks, carfares, and other small expenses. Estimating this family as 4.85 men, the food cost less than 80 cents a week apiece, or less than 12 cents apiece per day. It means all the train of incapacities which belong to undernourishment, anæmia, rickets, susceptibility to disease, inability to do mental work, and frightful strain on moral stamina. Why marvel at shiftlessness, improvidence, bad housekeeping, and yielding to temptation? Marvel, rather, at the persistence of the life-spark. The item of fuel $23.90 is increased in interest when it is remembered that the cost of fuel to the poor is increased often more than 50 per cent by reason of their being obliged to buy coal by the bucket, and wood by the bundle. It is useless for the economist to counsel the poor on this subject. The woman has not and never can have the money to buy coal by the ton, flour by the barrel, or canned goods by the dozen. One child states innocently that fuel may be had for nothing by the children who hunt it on the railroad tracks. Our tradition that economic precocity should not be forced upon children sounds flat and tasteless as a subject of discourse, with a child speaking thus.

The rent item of $86.31, or a trifle more than seven dollars a month, will mean little to people who have not seen the places which can be had for such price. The reports of Miss Breckinridge and Miss Abbott on Chicago housing conditions are vivid and accurate, setting forth with minute particulars the places out of which thousands of children come daily to the great public schools, confidently expecting the secret to be revealed to them whereby their condition will somehow be magically changed.

The item for clothes for this average family of seven is $54.18 for the year for all. The wife of one of our presidents once chose to tell the women of the country how to dress on $100 per year, and great and loud was the outcry. If any of the women of the ten million whom Hunter describes, and whom all school-teachers know, interested themselves in the controversy, they must have considered it about as entertaining as a recipe for enduring the tedium of a ride in the park in a touring car. Their clothing is haphazard, second hand, and insufficient. They suffer excruciating misery in winter. The children leave the schoolroom reluctantly, clinging to its warmth and comfort as long as possible. The wretchedness and squalor of the clothes of these poor kill the self-respect of the wearers as fast as they reach consciousness of differences.

The heart of childhood has fires of joy which nothing can quite quench, and no spectacle is more appealing than the grace and abandon of these children flinging themselves into the spirit of the folk-dance unconscious of any drawbacks in heavy and broken shoes or ill-fitting and ragged clothes. If one wanders long and far enough in the public schools, one finds a great number of teachers who make up to the children in many ways for the burdens which society lays on their shoulders. Like Tolstoi and one other, we ask, "What then shall we do?" The public school patiently takes one burden after another upon itself as society wearies or fails under the load, but can society devise any scheme by which the public school may force society to believe that the laborer who works hard every working-day and is sober and self-denying should somehow receive more than $500 a year as a wage for the tireless labor of production, sending in abundance to the markets of the world what immediately returns as a stream of gold? Five hundred dollars cannot clothe, shelter, and feed a normal family, with high resulting efficiency. Thousands of families are subsisting on it, but society will ultimately pay.

It is comparatively easy to work out the budget of the family with $500 to provide for 365 days. One need not worry over percentages and logical divisions. If the children are naked, spend some money for clothes and go without food; if they are hungry, buy food and go naked; if the rent is due and the landlord impatient, pay it and go without both. Books are no problem, since as one child very simply states: "Of course the children of this family will have fund books," meaning the books furnished free to indigent children in schools.

The industrial education report of 1900 has an illuminating bulletin on what the trained and the untrained man can earn. The man we have been considering is untrained and at 35 years his maximum of $640 is reached, when he declines steadily to $200 at 65. The trained man on the other hand at the age of 35 years has reached $1,270, and climbs on to $1,365 at 45, and declines to $1,000 at 65 years.

In turning to the budget of $1,000, the sum is so princely in the light of the $500 family that one is tempted to become scientific. Indeed, to use the city of Chicago as an illustration of a large city, it is found by generalization from the latest census report that $1,202.55 per year is the average wage of the salaried person; the term salary applying to the person paid weekly, monthly, or yearly in distinction from the one paid by the day. There are in this city 54,821 such, who on this average salary support from one to seven and often more people. Add the fact that the purchasing power of these dollars is steadily decreasing, so that the money which would have purchased 100 loaves of bread 10 years ago will buy but 95 today "with no relief in sight," as they say of convention weather, and one is forced to the experiment of attempting to make mathematics take the place of bread and butter, and long study of the method of spending the money make up for the meagerness of the amount to be distributed.

Dr. Engel teaches that, whatever the income, we shall find the items of rent and clothing maintaining a constant average for each of 25 per cent of the income. It is a very interesting phenomenon that it is the experience of the race upon which we depend for scientific data. None of the sociologists pretend to teach that the world is doing the thing wrong. They simply arrange the data in an orderly way and call it a science, which, after all, is the definition of science. Mrs. Richards differs so slightly from the Engel generalization that the variation may be ignored. In shelter, people, like water, tend to seek their level, and if they ambitiously or unwisely strive to reach above it and violate the law of ratio, again, like water, they are unstable and tend to calamity.

Thus if the $1,000 salary is drawn upon for more than $250 in rent, food or clothing or other well-being is endangered. So definitely is this fact fixed in the minds of most people that we decide promptly and with great definiteness concerning our neighbors, that they are or are not living in a house they cannot "afford." Hygienic conditions above all, availability to school, and other cultural influences, character for decency of the neighborhood, kind of highways, transportation, lighting—all must enter into the selection of this house which shall cost the tenant but a trifle over $20 a month. The pushing-on of tenants caused by business occupation of neighborhoods with consequent increase of value of ground space, as well as improvements adding to value of environment, forces this $1,000 family farther into suburbs, where soon the inherent and compelling desire to own one's place brings a deepening of thoughtfulness

about expenditure which presently analyzes the budget quite as skillfully as Engel with all his mass of material. Nothing can more swiftly and surely steady and improve good citizenship than owning a home. It quickens the imagination as to what it means to the other fellow if a neighborhood is degraded by liquor-selling, the social evil, or whether or not it is a hardship to have poor streets, poor lighting, poor sanitation. The welfare of the group is a matter of indifference to the casual dweller, but the family whose "place" has been paid for by pinching and saving is there to stay and environment is important.

This family of five shall be clothed with another $250. The scientific analysis of the family makes it equivalent to 4 men, who may spend $62.50 apiece on clothing. This must mean boots, hats, and underwear in sufficiency; outer clothing of decency and respectability. The mother must appear at the woman's or parents' and teachers' club with her appearance in keeping with her hopes and ambitions for the children. It is easy for the public schools to prepare women to carry on nearly all the clothing construction for the family in the home, thus increasing both quantity and, better than that, quality. But it is difficult to preserve this valuable attitude of self-sufficiency in the presence of the pageant of complexity, gorgeousness, and display which the pupils see in the windows of the department stores. If for two years influential shops should elect to present in their windows simplicity and refinement alone, the effect on the girls who are destined to marry the man with salary of $1,000 or less, or more, would be so far-reaching that all of society would feel the effect in a clearer basing of real values in living. Those who ride with wage- and salary-earners morning and evening, study their faces, hear their casual conversation, and see them rush to their work feel somewhat of the strain of human effort that provides money for the tawdry, the elaborate, the bizarre, and the useless that seems to attract so easily as it is displayed in the shop windows.

The problem of warmth and comfort must be faced and the woman who faces the task of buying woolen clothes, outer or under, for the household has an opportunity to sit in judgment upon the "fine Italian hand" of the tariff-maker. It will be an interesting moment when some great numbers of women come together as they did recently at San Francisco and spend an equal length of time studying Schedule K; valuable to hear the conclusion as to why one may not for a reasonable sum of money shelter the children from the biting north wind. The writer saw a woman shopping for "all-wool" dress goods and after tediously raveling and pulling she said, "Well, I will take the samples home, I will be back tomorrow." The clerk turned to the next customer with a weary smile. The customer asked, "Do you have many like that?" and he answered, "No," and both much relieved turned to the customer's affairs—and yet this was precisely what all women should do. The buyer of the department store did just

that, only more thoroly. The woman is spending the money capital of the business in which she is engaged for life and if she scorns to be a good buyer or if she is too ignorant to be a good buyer, either the family is cold and hungry or the bread-winner must make another spurt to make up for her mistakes.

Food has a ratio which is in inverse proportion to the size of the salary. In a $500 income it was 60 per cent, in a $1,000 income it is 30 per cent, and more than anywhere else in the home management the mother needs knowledge, good judgment, and diligence in business. Regarding this family still as the scientific unit of 4 men, there is the sum of $300 to be spent for food. This represents $75 apiece for the scientific unit, or $1.44 a week for each. Discussing this subject not long since with one of the most expert dietitians in the country, she declared that it could not be done except with as large a group as twenty, considering the standard of living which should be maintained. But the reply is unanswerable, it *is* done. We can count the calories and remain in consternation at the results. Meanwhile the children grow and prosper in and out of school. Their eyes are bright, their heads are clear, their spirits are high, they leap and run. Their well-being is maintained, but a scrutiny of the hands of the mother is very revealing as to where the burden falls of keeping the children well, strong, and happy. The children pick up many pennies at trifling tasks which pay for their pleasures and often help pay the grocer. They get an economic precocity which is often revealed by outbursts of almost supernatural wisdom on the part of children in the cookery classes as to where extraordinary grocery bargains may be had in the neighborhood—children of eleven and twelve ask the privilege of buying in class quantities at preserving time, describing all the while with tumultuous eagerness the variation in prices in the range of half a dozen blocks in all directions. Mother has not yet taught them the saving that can be managed by the use of the telephone.

These people, like the other group, cannot buy in large quantities; they must pay the everlasting and crushing tax of the person whose crime is having meager money in his purse. Instead of buying six bars of soap for a quarter they must purchase five bars at five cents each. They must buy potatoes by the small measure, and canned vegetables by the can, with all the extravagance in prices which this implies, and they can do no other way. The remaining $200 must be divided among fuel, light, church, insurance, carfares, amusement, schoolbooks, the doctor, incidentals, and saving. Out of hundreds of budget problems worked out by high-school girls in Chicago, only eleven omitted saving. If one is ever inclined toward pessimism throw a problem which is real into the hands of a group of high-school girls. One hears vast lamentation of their frivolity, of their extravagance, of their lack of purpose—space is lacking for discussion of this—but this statement is reiterated: with hun-

dreds of high-school girls working on a budget of $1,000 per year for a family of five, only eleven omitted saving. The attitude toward insurance is shown in another part of this paper. Their conclusions in regard to clothes invariably carried the definite implication that they were to make them themselves, including hats. It is true that the household arts group in the high school is not preponderant, except, of course, in the Girls' Technical High School. In this school the details of the budgets were worked out sufficiently in detail to be a working program for the inexperienced. All schools brought power enough to the question so that from thirteen high schools working independently and freely the final generalizations were those of Engel and Mrs. Richards. The variation was the constantly recurring expectation that the older children were to contribute something to their own support—and all precluded any type of private instruction.

The $2,000 income should maintain the 25 per cent average for rent and clothes (and this average is a veritable average of the three incomes) and practically the same average for food. The attempt is here made not to confuse the discussion with a vast array of figures. This gives the unit $2 a week for food in this family. This again means close and careful buying—$1,200 is thus used for food, clothing, and shelter. The operating expenses, such as fuel, lighting, service, if any, and what Mrs. Richards calls "higher life"—meaning books, travel, insurance, and so forth—are included in the remaining $800. The attitude of the high-school girls is that there should be very little hired service in the families with this income. They very perceptibly increased the appropriation for church and charity—also laying great stress on dentistry as if this were a luxury—as it is. To anyone with serious intention to be valuable to the world in ways great or small a perusal of Miss Addams' *Spirit of Youth in the City Streets* will explain the steady increase in the percentage allowed by the girls in the graded budgets for amusement—all were very definite, many describing where good things were to be found for a small sum.

Much stress has been laid on what the girls did, since it brought out so much of realization of money values. The discussion of the $500 income in many cases spread thru the whole school and into the neighborhoods and deepened the responsibility of the students toward the necessity of understanding.

As in the beginning so in the closing of this paper, the contention is made that most of the money that is earned is spent by woman and the returns from it will be in direct proportion to her wisdom, her intelligence, and her vision.

DIETETIC STANDARDS FOR THESE VARIOUS HOUSEHOLDS

ISABEL BEVIER, HEAD OF DEPARTMENT OF HOUSEHOLD SCIENCE, UNIVERSITY OF ILLINOIS, URBANA, ILL.

It seems well to acknowledge at the outset what I am sure is obvious to all of you, viz., that the task implied in the subject is an impossible one.

Dietetic standards can exist only for known conditions of occupation, race, age, sex, living habits, and even here scientists differ widely as to the bodily requirement for food and the economists even more as to the amount to be expended for it.

Perhaps that statement will help us to appreciate how tremendous a problem confronts the housekeeper. If she turns to authorities for information about the proportion of $500 to expend for food she learns (Massachusetts Report, 1910, *Cost of Living*) that on an income of $450 to $600, 55 per cent must be spent for subsistence merely; that means $275, 15 cents per person per day. She also learns that 63 per cent of that income has been spent for food; that means $315 per year, 17 cents per person per day, and it is not clear to the writer how, with the prices of the past year, it can be accomplished for less than 20 cents per person per day. Again to quote from the Massachusetts Report:

> It may be worth while to record the opinion in New York City, where rentals and provisions are perhaps more expensive than in any other large city, for an average family of five persons the minimum income on which it is practicable to remain self-supporting and maintain any approach to a decent standard of living is $600 per year.

John Mitchell has said:

> Six hundred dollars per year is the minimum wage that will maintain a workingman and his family, according to American standard.

The report says:

> An income of $600 in these New York studies means an expenditure of 22 cents per capita per day for food, and in the opinion of the committee with an increase to income of between $700 and $800 and 25 cents per capita per day a family can live without charitable assistance thru exceptional management and in the absence of emergencies.

But the report continues thus:

> In view of all the facts the committee is of the opinion that it is fairly conservative in its estimate that $825 is sufficient for the average family of five, three children under 14 years of age, to maintain a proper standard of living in the Borough of Manhattan.

Mrs. More's studies of 200 New York families showed that they needed at least $6.00 per week for food. Further data on the question is supplied by the Report of the British Board of Trade on the cost of living in principal industrial towns of the United States.

Total number of towns investigated 28. All except two east of the Mississippi. Distributed as follows:

New York	1	Central	6
New England	6	Middle West	5
Other eastern	4	Southern	6

So much or rather so little of help comes from the economists to the buyer of food when the income is $600. And yet the problem is a pitifully

real one and necessity compels it to be met every day, for statistics show that from 60 to 75 per cent of adult males earn less than $600 per year. We cannot then either as individuals or as groups dismiss the question. We are our brother's keeper, and some way must be found to interpret standards of living in terms of living conditions that shall make for health and efficiency in our national life. We need an awakened conscience, an attitude of mind that makes us feel it is wrong for one family to waste more than another has to eat each day.

We need instruction not only in making money but in spending it, and all kinds of helps to understand the real value of foods in human nutrition. At present to those who need the information most, dietetic standards and nutritive ratio have no more meaning than Choctaw. If they suggest anything it is food for the sick.

The small boy's definition of nutritious food—something that don't cost much and has no taste—is very generally appreciated, as well as the statement of the woman, "I'd druther do as I'd druther about food."

There seems to me no use in playing with the question. The cost of food is a fundamental one. Each year serves but to emphasize the fact that prices are not growing less, nor the supply of food increasing as fast as the demand. We are not assured that we shall have more money wherewith to buy food, so we must have more skill and more knowledge in the buying and using. Food values must be as much a matter of common knowledge as the multiplication table or number work. We need more studies of family budgets, more investigations into living habits, more studies of a living wage, and when all these have been interpreted in terms of common life and language we shall have the factors that enter into the making of dietary standards. At present our view is entirely too limited; one is certain that a knowledge of food values is all that is required, another thinks an appreciation of Engel's laws would settle the question, and very few recognize that the fundamental thing is a public appreciation of the fact that it takes superior skill and knowledge to be a good buyer of food products or administrator of the kitchen. We talk about administration of the household in the parlor and are both ignorant and helpless before the activities of the kitchen.

If I seem to have wandered afar from my subject it is because I regard an attitude of mind the first essential before one studies dietary standards. Let us begin with Hutchison's test for the value of a food. He says it must meet these four tests: chemical, physical, physiological, and economic, and I would like to add a fifth, the psychological. From these tests we gain knowledge of its nutritive value, its power to yield energy, its behavior in the intestinal tract, and its cost. With these tests in mind I wish to call your attention briefly to the tables which illustrate these tests.

1. Nutritive value and cost.
2. Calorific value.

A single illustration will suffice to show the point I wish to make about the psychological test. Recent scientific work, I understand, discredits this test, and insists that if the food contains the nutritive material and you eat it you will have the benefit thereof whether or no. Here the housekeeper's and the scientist's use of knowledge might differ.

The subject of discussion is the economics of the household as I understand the term; it means wise expenditure in the household, not alone of money, but of time, energy, food, anything that contributes to the welfare of the household. It does not seem to me wise expenditure to be giving people what they do not like even if it is 99 per cent pure food. In the selection of the diet attention must be paid to notion dignified by the title personal idiosyncrasy, tradition, or what not. It pays to avoid bringing these titles to light. In a certain residence hall, it was possible at a certain time of year to secure oranges in quantity for a cent apiece. The whole character of the table and the attitude of mind of the boarders was changed by simply satisfying that desire for "fruit for breakfast" by a penny orange. Notwithstanding the fact that the authorities said, "Fruit for breakfast is a luxury," the housekeeper knew that only by that penny orange could she give to the breakfast table the atmosphere that would make the boarders forget the other defects, and that once started with fruit, good humor and good appetite would prevail. It seemed to her wise expenditure if a penny could yield so much of satisfaction. A familiarity with these tests seems imperative for one who would attempt to expend money wisely for food. Important as the wise selection of food is, it is only one phase of the problem. There remains its preparation, its service, and a knowledge of the persons for whom this food is intended. This is why a standard dietary can be made only for known conditions of race, age, sex, occupation, climate, living habits—and even here authorities differ widely. The subjoined tables show a day's menu in terms of cost and nutritive value and energy for three different standards.

Let us consider the problem with an income of $1,000 per year. Professor Small is reported to have said:

> No man can live and bring up a family and enjoy ordinary human happiness on a wage of less than $1,000 per year.

The report of the Russell Sage Foundation on standard of living in New York City says: "The average amount spent for food rises from $290.10 per annum for the $600 families to $451.46 for the $1,000 group." Figures of that report coincide with the statement often made that with an income of $500 to $1,000 about half must be spent for food. These figures show that 44.6 per cent was expended when income was $1,100; 45 per cent when income was $1,200; 36.8 per cent when income was $1,500.

So the problem reads $450 for food, practically $1.20 per day, 24 cents per person per day.

One may not say what can be purchased, rather what is to be eliminated from consideration. Out-of-season food—this family may not have

strawberries in midwinter or grape fruit daily (but neither is essential to happiness or nutrition); expensive cuts of meat; much fresh vegetables or fruit. For this family, certain general principles hold. The smaller the sum to be expended, the more necessity for eternal vigilance and expert knowledge in buying.

The less money, the more need for psychology by the buyer and for skill in preparation and service.

This income is no excuse for mussy hash, soggy potatoes, and watery prunes. If brains and time go into the meal, mock duck, French fried potatoes, prunes and whipped cream may appear. To be sure it has taken time to prepare that meal. Some call it "puttering with food," to others it seems at least a fair question whether it does not yield better results than some other forms of puttering—at cards, or at the bargain counter, for example. On this income the man must be willing to eat "made-over dishes," provided they are appetizing, the children must learn to eat bread without sugar, and the wife to combine brains and skill with the use of the fireless cooker, and all must agree that food is not the only important thing in the world. Variety to them must not mean ten kinds of food at one meal, but rather five or three things well cooked and nicely served and let the ten find expression in variety of preparation. I know of a most interesting experiment in which five standard foods, viz., cabbage, potatoes, apples, wheat bread, and beef, were served for twelve meals without a repetition in preparation. That is an intensely practical and satisfying example of variety.

The same principles should guide in the $2,000 income where 30 per cent may be spent for food. This means $600—164 cents per day, practically 33 cents per person per day.

Even here the food must still be bought in bulk wherever possible. "Nourishing food" must not be interpreted to mean cream, eggs, and steak. One must not consider beans, brown bread, and turnips as "coarse fare," or feel defrauded and assume a martyr air if grape fruit is not served regularly for breakfast. There can be a wider choice, a more generous use of fresh vegetables, of cuts of meat that can be prepared more quickly, possibly a smaller use of cereals and dried fruits.

The family taste must not be trained in the direction of eating breast of chicken or porterhouse steak only. The demands of the higher life in a well-ordered home are to grow as income grows and their satisfaction costs money. It would appear then that certain general principles must guide in a wise expenditure for food.

Remember that both meat and vegetables have a place in the diet. Meat properly cooked is usually easily digested and furnishes building materials of a high order. Some vegetable may give building material in a cheaper form. Moreover, vegetables give bulk and mineral matters to the diet, the latter being very essential to growing children.

Do not seek to live on as little food as possible. No one knows the margin of safety. Avoid excess in food as one would any unwise expenditure.

Know what foods are really cheap or dear from the standpoint of nutritive value and cost. While fresh fruits and vegetables are desirable, they do furnish a small amount of nutritive material and so can rarely be considered cheap foods. Do not forget the uses of skimmed milk.

The cereals in general are cheap sources of nutrition and wheat bread gives much energy and building material at small cost.

Learn the value of the simmering burner and the fireless cooker in preparing food that requires long cooking, otherwise the resulting product is not truly a cheap food.

Practice psychology in unconscious direction of the family taste. Have seasonable food, not watery food on a wet day or fritters on a hot one. Watch the flavor and maintain high standards of service with a workable definition of variety.

And in all the process let her who does that spending wisely and well know, and let the world know, she is doing one of the great things of life when she brings health, satisfaction, and efficiency into the home thru its food supply, and let us teach everywhere to everybody, by all honorable means, in school and out, the value of food, the value of money, the obligation to spend both wisely, to set no false standards whereby a brother or a sister is made to stumble.

TABLES ILLUSTRATIVE OF VARIOUS POINTS IN THE FOREGOING PAPER

Department of Household Science, University of Illinois

This table shows the quantities of various foods that are required to equal a quart of milk in total nutrients.

A quart of standard milk weighing 34.4 ounces contains 3.3 per cent protein, 4 per cent fat, 5 per cent carbohydrate, and 0.7 per cent mineral matter, or 13 per cent total nutrients equal to 4.47 ounces.

Kind of Food	Total Nutrients Percentage	Amount Required (Ounces)	Cost per Pound	Net Cost
Beef round, medium fat	32.1	13.9	$0.125	$0.108
Oysters	11.7	38.2	.200	.477
Codfish, boneless dried	42.7	10.4	.150	.097
Eggs at 25 cents per dozen	23.3	19.1	.180	.215
Cheese, Cheddar	72.6	6.1	.200	.076
Wheat flour	87.2	5.1	.030	.009
Macaroni	89.7	4.9	.150	.046
Cornmeal, granular	87.5	5.1	.025	.008
Potatoes at $1.00 per bushel	17.4	25.7	.016	.025
Beans, navy dried	87.4	5.1	.062	.019
Cabbage	7.3	61.2	.025	.076
Cauliflower	7.7	58.0	.120	.435
Apples at $1.60 per bushel	11.4	39.2	.028	.068
Bananas at 20 cents per dozen	16.1	27.7	.085	.147
Prunes	66.0	6.8	.125	.053

Department of Household Science, University of Illinois

A NEW METHOD FOR INDICATING FOOD VALUES

By Irving Fisher

Composition of Milk

Method of	Protein	Fat	Carbohydrate	Total
Weight per cent	3.3	4	5.0	12.3 in 100 oz.
Calories per oz.	3.8	21	5.9	20.7 in 1 oz.
Calories per cent	19.0	52	29.0	100 in 4.9 oz.

Name of Food and "Portion" Roughly Estimated	Wt. Containing 100 Calories		Protein	Fat	Carbo-hydrate	Total
	Oz.	Gram				
Almonds, a dozen	0.53	15	13	77	10	100
Apple pie, ⅓ of pie	1.30	38	5	32	63	100
Bacon, ordinary serving	0.53	15	6	94	...	100
Banana, one large	3.50	100	5	5	90	100
Bread, a large slice	1.30	38	13	6	81	100
Butter, an ordinary pat	0.44	12.5	0.5	99.5	...	100
Cheese, ordinary piece	0.77	22	25	73	2	100
Chicken, ordinary piece	3.2	90	79	21	...	100
Cream, ordinary serving	1.7	49	5	87	8	100
Beef sirloin, small piece	1.4	40	31	69	...	100
Eggs, one large	2.1	59	32	68	...	100
Grapes, one bunch	4.8	136	5	15	80	100
Oysters, a dozen	6.8	193	49	22	29	100
Potatoes, one	3.6	100	10	1	89	100
Whole milk, ⅔ glass	4.9	140	19	52	29	100
Sugar, 5 teaspoons	0.86	24	..	..	100	100

A DAY'S MENU*

Breakfast

Food Materials	Wt. as Purchased Oz.	Nutrients Furnished			Cost per Pound	Net Cost
		Protein Oz.	Fat Oz.	Carbohydrate Oz.		
Apple	4.5	0.014	0.014	0.486	$0.030	$0.0087
Oatmeal	1.0	.160	.007	.675	.056	.0035
Hamburg steak	4.0	.768	.518	.....	.125	.0310
Baked potato	5.5	.099	.005	.809	.01	.0034
Bread (toast)	3.0	.276	.039	1.593	.030	.0055
Butter	0.5	.005	.425	....	.250	.0078
Sugar (on oatmeal 0.45 oz., in coffee 0.30 oz.)	0.75	.....	.....	.750	.060	.0027
Cream (on oatmeal 1.50 oz., in coffee 0.50 oz.)	2.00	.050	.370	.090	.125	.0156
Coffee	.....	.....	.....	.....	.350	.0100
Total	21.25	1.372	1.378	4.403	.....	$0.0882

Luncheon

Puree of baked beans	9.0	0.622	0.292	1.092	.....	$0.0167
Boiled ham	2.0	.404	.448	.....	$0.18	.0225
Baked apple	4.5	.014	.014	0.486	.03	.0087
Cheese (Cheddar)	0.5	.139	.184	0.020	.16	.0050
Bread	3.0	.276	.039	1.593	.03	.0055
Butter	0.5	.005	.425	.....	.25	.0078
Total	19.5	1.460	1.402	3.191	.....	$0.0662

Dinner

Roast lamb	4.00	0.788	0.508	.....	$0.16	$0.0400
Potato	5.50	.099	.005	0.809	.01	.0034
Tomatoes (canned)	5.00	.060	.010	0.175	.012	.0038
Bread	2.50	.228	.040	1.330	.030	.0045
Butter	0.50	.005	.425	.....	.250	.0078
Indian pudding	7.50	.369	.532	1.637	.064	.0300
Total	25.00	1.549	1.520	3.951	.....	$0.0895

	Protein	Fat	Carbohydrate
Total nutrients furnished	4.38 oz.	4.30 oz.	11.545 oz.
Equivalent in grams	123.0	121.00	323.000
Calories for the day	504.0	1,125.0	1,324.0

Total food for day ..... 4.11 lb.
Total nitrogen content for the day ..... 19.68 grams
Total calories for day 2953.00

*According to Atwater.

A DAY'S MENU

Breakfast

Weight as Purchased	Nutrients Furnished			Calories	Cost per Pound	Net Cost
	Protein Gms.	Fat Gms.	Carbohydrate Gms.			
Coffee, ½ oz.	.....	.....	.....	.....	$0.300	$0.009
Cream, ½ oz.	0.354	2.62	0.637	28.4	.163	.005
Sugar, 1⅓ oz.	.....	.....	9.450	38.0	.058	.0011
Oatmeal, 20 grams.	3.220	1.44	13.500	88.0	.060	.0026
Milk, 2 oz.	1.870	2.26	2.82	40.6	.072	.009
Sugar, ⅓ oz.	.....	.....	9.450	38.0	.050	.0011
Toast, 2 oz.	5.400	.68	28.23	150.0	.030	.004
Egg, 2 oz.	7.400	6.60	.....	81.0	.08	.010
Bacon, 1 oz.	4.010	10.06	.....	108.0	.25	.015
Butter, ⅓ oz.	.....	8.03	.....	73.0	.34	.007
Grape jelly, ½ oz.	1.700	0.014	8.28	34.8	.12	.0038
Totals	23.954	31.70	72.36	679.0	.....	$0.0676

Luncheon

Tomato soup, 4½ oz.	3.07	.....	9.92	137.0	$0.048	$0.013
Baked beans, 2 oz.	13.6	1.4	36.60	336.0	.0784	.0098
Brown bread, 2½ oz.	.....	.....	.....	.....	.....	.....
Butter, ⅓ oz.	.....	8.03	.....	73.0	.340	.007
Baked apple, 5⅓ oz.	.362	0.01	21.40	58.0	.030	.0107
Cream, 1 oz.	.708	5.20	1.27	57.0	.163	.0050
Cookies, 2 oz.	3.34	5.10	38.0	117.0	.067	.0083
Totals	24.62	21.24	137.09	925.0	.....	$0.0579

Dinner

Brown potato, 4 oz.	2.00	.11	20.86	77.0	$0.020	$0.005
Roast beef, 4 oz.	21.90	8.05	.....	205.0	.150	.036
Macaroni and cheese, 3.6 oz.	11.03	16.8	29.4	325.0	.097	.022
Bread, 2 oz.	5.4	.68	28.2	150.0	.030	.004
Butter, ⅓ oz.	.....	8.03	.....	73.0	.340	.007
Custard, 5⅜ oz.	7.45	7.10	15.8	163.0	.057	.0193
Cracker (1), ⅓ oz.	1.16	.80	8.42	45.0	.100	.0025
Lettuce salad, ⅛ oz.	.86	10.0	.30	104.0	.240	.013
Totals	49.80	57.57	102.98	1,142.0	.....	$0.1088
Totals for the day	98.37	110.51	312.33	2,746.0	.....	$0.2343
Totals for day in oz.	3.4	3.8	11.0	.....	.....	.....

A DAY'S MENU*

Breakfast

	Gms.	Gms.
Coffee	119	
Cream	30	
Sugar	9	
Total		158

Luncheon

One shredded wheat biscuit	31	
Cream	116	
Wheat gem	33	
Butter	7	
Tea	185	
Sugar	10	
Cream cake	53	
Total		435

Dinner

Pea soup	114	
Lamb chop	24	
Boiled sweet potato	47	
Wheat gems	76	
Butter	13	
Cream cake	52	
Coffee	61	
Sugar	10	
Cheese crackers	16	
Total		413
Total food for day 2.22 lb. or		1,006
Total nitrogen content		6.62
Total protein content		41.375
Average fuel value per day		2,000 calories

*According to Chittenden.

DISCUSSION

Irene E. McDermott, director of household economy, Pittsburgh Public Schools, Pittsburgh, Pa.—It has been stated that 75 per cent of the adult males in the industrial sections of this country earn less than $600 per year.

The Interstate Commerce Commission reports that in the face of a large number of highly paid manual and salaried workers the real average income of nearly two million railway employees during the year before this report was $662. The majority of ministers of all denominations receive less than $1,000 a year.

How to handle this average income for the average family and maintain the family as an efficient unit in society is a problem well worth careful attention.

That the problem is receiving attention is daily proven to us. There is scarcely a magazine, scientific or classified in any other known class, which has not told us all about it. There are training schools in the country endeavoring to make household economy more effectual by establishing model apartments or cottages. Some of these are in reality maintained on a very efficient basis with correct relationship between the economic and social standardization. Others are worked out in theory to a large extent and often prove a stumbling-block to the eager, practical housekeepers who vainly endeavor to emulate the standard at the stated cost.

It is time that some association having aspirations to render help in our work, took a stand and tried to set at least a feasible standard for the social efficiency of families having certain material resources.

Someone has said that money represents crystallized energy or power. Now energy and power are measured with a fine nicety. When this is possible, there should be some absolute measure for determining the purchasing limit of a given amount of stored-up energy or power.

However, there are many different viewpoints in making an estimate, or taking stock of one's income.

A man earns $600 a year—which represents his economic worth to a community—90 per cent of this amount may be spent by an intelligently trained home-maker. This adds much to the stated amount, for it then represents the original $600 plus the economic worth of this woman's training. The reverse is true when the 90 per cent is spent by a woman who has not been trained to make a wise expenditure. Then our proportion reads $600 minus what this woman's lack of training would take from the purchasing power of the sum stated.

Again, the family may be in a position to make another increase for the purchasing power of the money. A garden may furnish valuable additions for the family menu. Adjacent water may make fishing a gainful recreation. A residence in fruit-growing communities may permit "picking on shares" as a possibility for non-wage-earning members of the family. These and many other advantages make a force worth reckoning with. Good health for the members of the family—coming in the shape of an inheritance or brought by right living—is another source of a gainful addition.

There are many occasions when it is necessary for the wage-earner to stand for higher wages. However, there are more occasions when it should be necessary for that long-enduring public to take a stand, and demand that these purchasing agents in the American homes should have an opportunity for becoming more efficient.

This will never be brought about by untrained writers demonstrating smug theories about their pet economies. It can only be done when public schools standardize dwelling-places and establish suitable, nourishing dietary standards.

We have long since learned that a square will not fit into a round space without a bit of alteration in its shape, and then it would no longer be a square. We must realize with equal force that a family having crystallized energy amounting to $600 a year cannot use from this sole quantity crystallized energy equal to another income twice that amount belonging to someone else.

The typical American family of this generation consists of five members, father, mother, and three children under wage-working age. The American School of Home Economics claims that the average family should have $360 a year for food to keep its members in health. To this amount must be added the operating expenses of the home and other necessary expenditures. If the average wage now earned by the average head of the family is not sufficient to sustain the American standard of life, it is time that the real truth of the fact should be known. Members of this and other associations standing for furthering the efficiency of successful teaching of home economics should give their best thought to this question.

We have had papers read today showing that there are some who have done this. The research should be of a wider nature. The splendid clubs of this country which are doing much toward helping to handle the problem should enlist more help and sympathy.

There is as much misery and crime brought about by an inordinate desire to possess clothes unsuited to one's income, as there is in the overindulgence in strong drink. It will require a long time to convince the public of this fact.

The question then is: "In what way may we increase the ability of the future home-makers toward increasing the power of the crystallized energy of the average income for the average family?"

THE PLACE OF ART IN THE HIGH SCHOOL OF COMMERCE

J. EARL GRIFFITH, CENTRAL COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N.J.

Within the past few years, the inadequacy of public-school education for the masses has obtruded itself upon the minds of our keenest educators. Anticipating the future of the individual, the classical high school's greatest efficiency lay along the lines of college preparation. Yet the number of students who were actually able to utilize this opportunity were in the minority.

It was plainly evident that a means must be devised whereby, without extra expenditure, a usable, practical, self-efficient education could be extended to the maximum number of pupils. After a careful and deliberate study of the needs and requirements of such a preparation, technical and commercial education have been the logical solutions. It is a phase of the latter type of vocational training which pertains to us within the limitations of this paper—"The Place of Art in the High School of Commerce."

It seems, therefore, necessary at this point to define terms. First, art is not a thing to be done but is the best way of doing whatever is to be done. Second, a high school of commerce (as distinguished from a commercial institution) is a high school wherein the requirements not only include thoro courses in bookkeeping, stenography, typewriting, banking, and the like; but there are found also such required credits as a four years' course in English, a thoro training in business mathematics, strong courses in botany, physiology, and chemistry. And in this list, required—non-elective—is applied art. The training of the so-called commercial college has been found inadequate. The ability to keep an accurate set of books or to produce a neat and correct typewritten letter is insufficient. In short, the graduate of a high school of commerce must be fitted for a broader, more cultural business career. Not only the typist or the bank clerk is now an exponent of such a school; but the buyer, department head, or advertising manager is not too great a product to demand from an institution of this caliber.

The subject for discussion then, is: In what way is art a factor in the best possible equipment of the individual for a broad, efficient business career?

The influence of art upon industrial and commercial progress is so apparent as to make instruction in that branch a necessity in a course of study designed to prepare for commercial pursuits. It is of vital importance, because competition, in the business world today, is largely that of quality of skill and of beauty. It therefore becomes the responsibility of the art department to teach the discrimination between the various degrees of quality, to develop the skill of hand necessary to successful production, and to give birth to or awaken the feeling and appreciation of beauty. To just

what extent the vocational school should equip for life-work is a subject for discussion. The technical courses cannot hope to turn out master mechanics. The bank president is not the immediate result of a commercial course. So, in art, the course must be considered a success, from a business standpoint, if it provides for the individual a means of sustenance and lays open before him a direct path leading toward a definite end.

Such a course should be broad, for the demands upon the worker will be varied. The art must be "applied," in the sense that nothing should be permitted to exist for beauty alone. The pupil does not simply design; he designs for some specific purpose. Every step must be one of a logical sequence, leading toward a definite and well-defined culminative end. Of necessity, the plan must comprise nearly all that is taught in the classical high school, viewed thru the lenses of commercial utility. From the former course may be taken much of the handwork; but to that course must be added a most thoro preparation in printing, a careful study in interior decoration, actual drill in arrangement of counter and display case, together with a sound study of the principles of advertising.

Processes of manufacture and tests of quality of such commercial products as textiles and fabrics relate themselves quite as much to the art department as to the chemical or physical laboratory. A knowledge of design and color, of the fitness to purpose of an article, of its construction, and a study of the materials used in its production are necessary in successful selecting and buying. The future business man must be given skill in the correct display, convincing advertisement, and intelligent sale of his stock. The clerk must be directed in the arrangement of his wares. The stenographer must be shown how to space his letters and business papers and directed in the printing of placards and labels. A knowledge of the necessary planning and designing of office furniture and the making of working drawings for the same is most essential. Art, an undeniable factor in business, in industry, in commerce, is of vital importance in a course wherein boys and girls are to be fitted for thoro business careers. The aim of such a course should be not so much to give proficiency in the crafts as to give discriminating taste and judgment.

Bordering an enormous pit at the corner of Barclay Street and Broadway, New York, stood a sign: "Cass Gilbert, Architect of the Fifty-five Story Woolworth Building"—and the building was yet a dream. Wolf and Redfern of Paris do not ply the needle and yet they stand pre-eminent as creators of apparel. Every thread of the cloth which clothes you was plotted on paper ere the looms were set in motion. The engines which drove those looms were drawn to absolute scale before ever a pattern of a single wheel was made. Here have been cited, offhand, but four small component parts of society's mighty mechanism. Back of each, and deep-rooted as tradition, stands the artist. And yet, it has been the custom of the past for education to thrust the individual into this

life of commercialism without any working knowledge whatsoever of the art side of business.

Just the place that art occupies in the commercial world, it should occupy in the high school of commerce—not a separate, intangible mystery, understood by the few; but a practical, usable, everyday necessity. What each individual and indispensable thread is to the warp and woof of the fabric, English, mathematics, art, and their kin should be to a school curriculum; each rendering service to the others; each incomplete and insufficient in itself alone.

Now that a general view of art's place in such a school has been obtained, permit the writer, in brief, to cite one or two specific instances of its significant correlation.

It is not within the province of this paper to discuss whether or not manual training, sewing, or millinery should have places in a high school of commerce; but since more than one such school has already given them place, the subject must be considered from that viewpoint. With these three branches, art is as imperative as is a rudder to a ship. Yes, perhaps it must be life-preserver, too.

Designs for metal and wood, worked out to size or to absolute scale and studied for suitability to purpose, proportion, and beauty of design, should precede each problem and be constantly consulted during its construction. Great care should be used that the design not only be correct from a design standpoint, but that it be fitted to purpose and material and be capable of enduring the processes it must undergo during its construction.

In the millinery and sewing courses, the design sketch should be considered only a means to an end, for it is folly to design in terms of two dimensions for the human body, an object of three dimensions. Even Mrs. Wiggs in *Lovey Mary* discovered that a person "can't be goin' and comin' at the same time." After a series of quick spontaneous sketches, a model (in actual size), worked out on a form and in tissue paper and inexpensive textiles, and then applied to the figure, should precede the hat or any but the simplest gown. Rather should these courses be termed "household arts" and be supplemented by actual shopping trips together with lessons in the tests of cotton, wool, linen, silk, and a training in the recognition of the relative quality and values of these materials. These lessons form the connecting link with interior decorating, a subject which should be considered from the standpoint not only of the home but also of the office, taking up the designing of office furniture, filing-cases, and the like. In all instances both spacing and color schemes should be made subjects of study.

The department should aid the business courses by assisting in the spacing of its correspondence, filing-cards, etc.; and by designing its letterheads and business forms.

A teaching of the knowledge of printing together with the methods of dictation as to its set-up, including instruction in proofreading and the

necessary characters involved, are responsibilities which the art department, the business department, and the English department should share with well-planned correlation. A printing-press, in actual operation, is the logical end of such training.

And now we come to another phase of instruction which is a necessity in a high school of commerce because it is a necessity in the business world.

> It concerns every home in the land, as a home, and every man and woman, as men and women. There is not a person who expends even the most modest income for the most modest necessities of life but is affected by advertising. It is the one art which interests every person, the one profession which enforces its tenets upon all who live, the one business which means profit or loss to every individual who earns or spends money. Whether we will or not, whether we know it or not, we are all dependent upon advertising and to each of us it means gain or loss.

Wise students are not wasting their time in an attempt to curb the influence of the sun. Rather are they devising means of harnessing its mighty power. No more can we turn advertising into art. It is our problem to turn art into advertising. "Aaron's rod was a crude and feeble instrument compared to a well-conducted advertising campaign." Such a campaign has made more than one president of the United States. Such a campaign has changed a little corner drug-store into a continent-wide syndicate. "Midas was an amateur in gathering gold compared to the advertising campaign, skillfully prosecuted."

It remains for us, then, to give fundamental instruction in this business necessity; and in no phase of business activity is art more pitiably wanting than in advertising. George H. French, who has probably compiled the most logical treatise on the *Art and Science of Advertising*, says:

> Advertising will always remain a craft, an art, or a profession according to the preparation, talent, and application of the artisan or artist; but the intelligent advertiser will make use of every science that can contribute to its success, and the greatest of these is psychology. But, on the other hand, psychology alone can never teach a science of advertising.

It has been found that the student of vocational school age is not too young to imbibe the necessary principles of psychology when they are demonstrated to him in a clear, simple, applied explanation, with no mention of the fact that he is undergoing such a serious operation as the psychologizing of his mind. Parallel with these principles, the art side should progress with logical development, and should comprise printing from a design standpoint together with practical experience in illustration. Here again processes and costs of reproduction are necessary items of instruction; and here again correlation with the English department is solicited.

Such is the place that art should have in the high school of commerce, if that school is to succeed in its specific purpose. It is the subject most efficient in the curriculum in its amalgamating power of correlation.

At this point, permit the writer to make a plea for the sincerity of such

a course. Without the firm support of the local educational executives, the subject must of necessity lose much of its power. It should not be given the tag ends and left-over portions of the time schedule at the hour of organization. Neither should it be cataloged as an optional or elective subject. Under such conditions it starts its race handicapped. True, much of the past criticism accorded to the impractical artist was due him. For, with his "art for art's sake" ideas, his planless and purposeless course of study was like the man who was being chased by a tiger—he was on his way but he knew not whither he was going Full many a pedagog wastes his life trying to realize his ideal, forgetting, erewhile, to idealize his real. Alas, too often, he has hitched his mental automobile to a star, and the terrific momentum thus acquired has blinded him to the absolute necessity of thoroness in the daily routine of fundamental preparation; and he "skids" along far over the head of the average pupil. The course must show convincingly its every purpose, its definite goal, and must fulfill its every promise. To this end, every step must be one of the most zealously and methodically planned continuity.

If this paper has seemed to place too great a weight of responsibility upon the shoulders of art, be it said, in passing, that just this weight is being borne, with success, by two schools of this nature, known well to the writer. In closing, may I quote from a recent address on "Ideals in Education," given by Professor Franklin W. Hooper, of the Brooklyn Institute, in which he says:

> The three R's are but a preparation for further study. One-third of the school time is wasted in educational fads and only recently have the true progressive ideas of manual training and industrial education begun to receive the attention which their importance demands as preparation for an independent future. For the three R's I would substitute three I's: Industry—teach the boy or girl to love work, and you have laid the foundation for the building of character, for the encouragement of independence, for the development of will and the power of application: Integrity—strict honesty to ourselves and to one another as a fundamental principle of life and character building; and third, Idealism—the ideals to be derived from the study of history, of the Scriptures, of the prophets and sages of all time.

To this let us add these words, quoted from Ruskin:

> Education without Industry is Guilt;
> Industry without Art is Brutality.

THE VALUE OF ART IN THE INDUSTRIAL SCHOOL

WALTER SARGENT, PROFESSOR OF ÆSTHETIC AND INDUSTRIAL EDUCATION, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Art presents two important aspects, one of which is usually designated as representation and the other as design. One consists in picturing facts and appearances; the other in arranging lines, proportions, colors, etc., in order that the results may satisfy the sense of beauty. Each of these is

of genuine value in the industrial school. I shall discuss the contribution of each, under the following captions: drawing as a means of increasing one's range of activities in industrial processes, and design as a factor in increasing the quality and therefore the value of industrial products.

I. DRAWING AS A MEANS OF INCREASING ONE'S RANGE OF ACTIVITIES IN INDUSTRIAL PROCESSES

There are two methods of dealing with material, one of which may be characterized as direct and the other as indirect. The direct method is concerned with the immediate handling of material. The indirect method carries on its preliminary planning and experimenting in some medium which is substituted for the actual material because it is more easily and economically handled. A representative operation thus takes the place of the actual one until the more important question of plan and design have been decided. The representative operation is then translated into the actual material.

For example, a person in making a garment may act directly upon the material by proceeding at once to cut the cloth and experiment with it till he has shaped the garment as it should be, or he can leave the cloth untouched until he has completed his experimentation in terms of drawings and paper patterns, and then translate the results into the final material.

An Indian can proceed directly to the erection of his wigwam, but the construction of a modern building must be approached indirectly by means of the architect's plans. The direct method which is often suitable in simple and familiar operations becomes immensely wasteful when the operations are complicated. The indirect method is adequate and it means economy of time and material.

Drawing contributes in two ways to the indirect method of dealing with materials. First, as a means of experimentation, freehand sketches of shapes enable one to determine his ideas of the general appearance of a piece of construction. These drawings, in elevation or in perspective, are the means by which he can experiment with forms and choose from a number of possibilities that one which is best. Secondly, as a means of exact definition, working drawing has become a highly specialized and conventional language, sufficiently developed to furnish a means whereby one may work out all the data of construction even to minute details.

Industrial schools should provide students with both of these means of dealing with materials indirectly, and a large amount of practice in rapid freehand sketching, both of perspective appearances and of projection, should be given. To devote a relatively large proportion of the time allotted to mechanical drawing in high schools and industrial schools to instrumental drawings carefully finished in ink seems to me to be a mistake unfortunate in its consequences. A student should know what it means occasionally to carry to completion an inked-in drawing. In general,

however, the perfected instrumental drawing bears to the freehand working drawing in which are noted the necessary data which the student has secured from objects or from his ideas a relation comparable to that which exists between an author's original manuscript and the typewriter's copy. The latter looks much better but does not represent so much thinking.

The natural tendency of the majority of industrial workers is toward the more primitive, direct, unconsidered, hit-or-miss method. Few stop to project detailed plans until forced by necessity to do so. As soon as one becomes proficient in this method of procedure he can guide the work of many hands.

During the formative years of the high and industrial school the significance of a mastery of drawing as a common means of expression lies deeper than its evident use as an immediate aid to constructive work. It establishes a habit of dealing with material in such a way as to call into exercise the higher mental activities. We know that habits of dexterity soon become fixed but we do not always realize that habits of thought and of imagination tend to become just as definitely formed. When the primitive habit of dealing directly with materials has once become established, it does not easily change to a more effective method. Unless the other sort of habit is early developed, a man stands less chance in his struggle against automatism and the influence of the machine. Drawing is not only a useful accompaniment of constructive work and a tool with which to think and plan. It is also an important factor in determining the level of a man's industrial habits.

II. DESIGN AS A FACTOR IN INCREASING THE QUALITY AND THEREFORE THE VALUE OF INDUSTRIAL PRODUCTS

One need not go far in the study of human nature to be impressed by the profound and insistent demand for æsthetic satisfaction. This is not the place for a philosophical discussion in order to determine the relative value of this demand in comparison with others. In considering its recognition in industrial schools we are faced by the practical consideration that, even in commercial lines, it determines the direction of an enormous amount of human effort and of great sums of money.

Because its basis is in the emotions, it is too often considered as something which is vague; something which may be ignored until a time when more practical issues shall have been settled. This is a mistake. The demand is not vague. It is definite and persistent, but our knowledge about it and our ways of dealing with it are characterized by a high degree of nebulousness.

The æsthetic demand springs from elemental emotions. It will be ministered to in some way or other, either by sensational stimuli of things new, strange, ornate, diverting, fashionable, or by being brought into contact with and led to appreciate things which are excellent and which constitute sources of permanent satisfaction.

Lack of well-established standards and of developed appreciation of them leaves this deep-seated impulse to seek satisfaction in unpromising ways, and results in a feverish demand for continual change, which is often grotesque in its unreasonableness, and which, to state it in no more significant terms, is the cause of enormous economic waste, since many lines of manufactured goods must on this account be changed once or twice every year.

Many industrial schools realize the situation and would be glad to accord more recognition to the teaching of design in their courses. They are confronted, however, with a practical difficulty. They can secure many teachers who will present abstract principles of design, but few who can use them as a method of procedure in such a way as to be able to say of a specific industrial product not only that it is good or bad, but why; and who can then proceed to point out the way to make the inferior product better.

There is need of systematic study of industrial products of great artistic merit, in order to define, so far as may be, the elements which contribute to this degree of excellence. Some of these elements are definable in terms of materials, colors, and shapes. Others are due largely to the individual genius of the designer and suggest the need of investigation as to the best methods of training designers.

The art department of every state university should make a list of those industries in which the state is engaged, which depend for their success, to any considerable degree, upon good design. It should investigate imports along these lines, and analyze them for suggestions. It should gather specimens or photographs of the best historic examples and become acquainted with the most noted modern producers. In this way a museum of design as related to the industries of the state would gradually be established and become an important center of reference.

Some plan should be developed whereby unusual talent for design may be discovered in children in high schools, and these children be advised as to the best way of developing and applying this ability. The desire for artistic expression is exceedingly strong in many young people. A large number who would find satisfaction for this desire, and also a field for great usefulness in design, now give themselves to painting because they have not been shown the possibilities and attractions of work in design. Talent in this line is a definitely valuable asset to the state.

In its twofold capacity of furnishing a means of increasing one's power to deal with materials by a representative means, such as plans, and of making our industries, because of good design, minister not only to utilitarian but also to æsthetic demands, art has an important contribution to make in forwarding modern industrial education, and a well-defined place in industrial schools.

THE DRESDEN CONGRESS

FLORENCE E. ELLIS, SUPERVISOR OF DRAWING, CLEVELAND, OHIO

The history of the international congress of art teachers is familiar to many, to others it is not, therefore a brief review seems in order.

The first international congress of art teachers was held in Paris at the time of the International Exhibition of 1900. Its purpose was the development of drawing and related subjects. This first congress decided to establish an international association of art teachers which should conduct the congress; carry out resolutions passed at the congress; interest people, professional bodies, and governments in its welfare; collect drawings and materials connected with the teaching of drawing and related subjects for use of its members; and be a connecting link between succeeding congresses.

The second congress was held in Berne in 1904 and at this time the association was founded as the International Federation. Papers relating to drawing in general instruction were read and discussed, and a small exhibition of drawing was held, but the exhibition was not really representative of the work of the different countries, as there had been no definite plan in its selection and arrangement.

The third congress was held in London in 1908. The program consisted largely of papers and discussions on the educational value of drawing, and on methods of presenting it in various schools and in different grades. The name of the association was made the International Federation for Art Education, Drawing, and Art Allied to Industries. A large exhibition of drawing was one of the most interesting, helpful, and successful features of the meeting. This exhibition showed the best work of the countries represented—their ideals of art education in the schools. The American exhibition was a composite exhibition selected from some sixty cities. It showed the drawing in the elementary schools and high schools and there were also several exhibits from colleges, and from schools of fine and industrial art.

The fourth congress is to be held in Dresden, August 12–18, and promises to be the most successful congress yet held. The small number in attendance at the first congress increased to 823 members and 22 countries represented at the second congress. At the third congress there were 1,819 members present and 38 countries represented (of this number some 200 were American art teachers), and a still greater increase is expected at the Dresden congress. The subjects of the papers and discussions are as follows:

The Psychological Principles of Drawing
First Steps in Teaching Drawing to Young Children
Drawing, Modeling, and Manual Work as Means of Expression in General Education
Art Training for Applied Art and Industrial Purposes

Training of the Art Teacher
Organization of Schools for Technical Art Training
Development of Taste thru the Teaching of Drawing and Manual Work
Lettering and Teaching of Lettering
The Underlying Principles Which Should Govern the Art Teaching in Secondary Education
Technical and Professional Teaching of Drawing

An international exhibition of drawing and allied work and methods of instruction will be held August 4–25. It was desired by some foreign countries that the exhibition from the United States should show a solution of problems in different parts of the country and in different grades of work; therefore the general plan for the American exhibition is as follows:

GROUP I

UNGRADED SCHOOLS

The work of this section is a composite of work gathered from many states, and is to show how drawing is conducted in the ungraded schools thruout the country.

GROUP II

WORK FROM A MEDIUM SIZE CITY (MINNEAPOLIS)

GROUP III

REPRESENTATIVE LARGE CITIES, EAST AND WEST

Boston, New York, Cleveland, Chicago, St. Louis, Denver, and San Francisco.

GROUP IV

NORMAL SCHOOLS, NORTH, SOUTH, EAST, AND WEST

This exhibition will present the work of representative normal schools.

GROUP V

ART SCHOOLS HAVING NORMAL AND INDUSTRIAL INSTRUCTION

This section will be composed of exhibits from the Massachusetts Normal Art School, Rhode Island School of Design, Pratt Institute, Pennsylvania Museum School of Industrial Art, Maryland Institute, and the Normal Department of the Chicago Art Institute.

GROUP VI

ART DEPARTMENT OF UNIVERSITIES

Newcomb College, and Teachers College, New York City.

GROUP VII

REPRESENTATIVE ART SCHOOLS

School of Applied and Normal Art, Chicago; School of the Museum of Fine Arts, Boston; the Art Students League, New York City; the Pennsylvania Academy, Philadelphia; the Art Institute, Chicago; and the School of Fine Arts, St. Louis.

It has been recommended by the American committee that a report consisting of edited copies of papers presented at the Dresden congress, supplemented if possible by illustrations of foreign exhibitions of special interest to Americans, and by short articles on the congress written by Americans in attendance at the congress, be published by the American committee;

that the report sell at $2; and that a report be given to every teacher who subscribes $2 for the congress fund. Such a report will serve a double purpose; it will be of value to American teachers who cannot attend the congress, and it will aid in raising funds for the congress.

The International Congress is a wonderful impetus to art education in many ways. Thru its exhibitions and discussions it affords a direct comparison of the work and methods of different countries; it gives international co-operation among art teachers; and from it the art teachers of the nations of the world receive inspiration and help. It deserves our heartiest interest and support. I trust that many of us can avail ourselves of the fine opportunity for advancement offered by attendance at the Dresden congress.

The International Federation for Art Education, Drawing, and Art Applied to Industries is a very important factor in the promotion of art and industrial education. Its members are the leading art and industrial teachers of the world, and its conclusions will be worth careful attention.

Let us not forget, in the enthusiasm of the present for the practical in education, that education should and must be cultural as well as practical. A training of the hand principally is not education. Education is a training of the whole child—it is a training of the eye, the hand, the mind, the heart, and the soul.

VOCATIONAL TRAINING OLD AND NEW

T. VERNETTE MORSE, PRESIDENT OF ARTCRAFT INSTITUTE GUILD, CHICAGO, ILL.

In attempting to solve the problem of what to do with the boy and incidentally the girl, we are not dealing with entirely new ideas; most of them have been tried before.

Possibly there are a few in this audience who were at one time problems; if so they are better able to appreciate all movements that will tend to put into action the undeveloped ability of humanity in such a manner that each community will be able to develop its own people and resources according to its requirements in both work and play, thus contributing to the world's advancement thru local endeavor.

Nature has so distributed her gifts that each locality is, or should be, a law unto itself, and not an experimental station for the purpose of promoting the ethics of some educational system prepared under entirely different conditions and in no wise adapted to local demands.

Science has given this century such marvelous means of communication and transportation that to develop local conditions is to win the recognition and approval of the world. It has in fact opened the doorway of modern opportunity. This being true, the fact confronts us that we do not need more schools of ancient origin, wherein we are forever getting ready to do

things but are never permitted to act them. In this creative age we have no right to ignore the lessons of the past, for that past, if it is worth while, was also a creative age, and we must respect its efforts. Let us then incorporate those teachings with the necessities and demands of modern life, that we of this century may also build for the future, for better homes and better community life.

During this great convention, every phase of vocational training has been presented, each exponent evidently having a different idea of how the work should be conducted. This is most encouraging as it is a sign of freedom. Freedom means progress; the bitter differences of today are frequently the cohesive elements of tomorrow.

Many of the suggestions presented are non-cohesive, fragmentary specimens of personal experience with technical conditions, reminding us of our early days in drawing when we worked for weeks on drawings of ears and eyes and noses, which we laboriously pieced together until they in some manner represented a so-called classical head. If this composition was sufficiently organic to hold together the author had arrived, and was able to write a book or establish an art school.

Fortunately that period in art instruction is a thing of the past, for we have now learned that art is something more than mere technical drawing and painting. It is the most perfect and beautiful way of interpreting and intelligently expressing the thoughts and ideals that lie within, the beauty of life's labor.

That word "life" brings us again to the starting-point. How many of the present-day educators are working in harmony with this vital spark? Are they not more frequently engaged in putting forth the institutional tenets and technical dogmas of the past, instead of developing mental and physical growth?

We of the past may have been educated as genuine artificial classics, with false ideals in regard to physical labor, with false pride, and many other inconsistent ideas, but we had one great advantage. When we were presented to the world with a diploma in one hand and a burning torch of self-esteem in the other, we did not have to do things. Our position was such that in case of ignorance on any question we could smile, look pleasant or wise as the occasion demanded, and occupy at least a cultural position in the world. But what of the artificial tradesman, he who cannot conceal his blunders, he whose houses must stand or imperil the lives of those who occupy them, he who must build for use as well as beauty? As leaders in this great work, can we for the sake of self-glory, worldly popularity, enviable positions, or even a fat salary afford to turn out false products?

This is the vital question of the hour.

Trades and recreation, like boys and girls, are not wholly new subjects, but our point of view has changed. The development of machine-made industries has taken from our homes the great anchor of mutual activities.

There is no longer a need of homemade clothing, carpets, or furnishings of any kind. Man has created and developed wonderful things but let us thank God that in his great wisdom he did not give man the ability to make grain, trees, flowers, and other growing things. Nature has reserved a few forces which man may possibly improve but cannot create.

In the city the five-room apartment supplies all the requirements of the average family, which seemingly needs nothing that cannot be brought home in a paper sack, and therein lies the principal viper of increased cost of living. If you are earnest in this work, keep your eye on the paper sack and its contents. Nothing to cook; nothing to sew; but little to mend and repair with socks warranted to wear six months, for we all know they will go out of style in that time—and who cares to wear even socks that are passé? No buttons to sew on when the very latest device calls only for a patented safety pin; nothing to do—no personal activity that is absolutely necessary to make the character of those about us greater, better, and nobler—is it any wonder that we have created a new disease, popularly known as slumming and charity giving, which in many instances creates false taste, restless conditions—and dependence, if not pauperism? Better artificial classics than this.

Out of these modern homes, women—restless women—are constantly going into store, shop, and factory, swelling the tide of cheap, inexperienced pin-money labor. Is it any wonder that we are restless?

I thoroly believe in teaching every girl a trade, a craft, a profession, or whatever you choose to call it, but I do not believe in opening the shop or factory door and driving them all into it. That is only the other extreme of driving them into the university. I say open all doors of educational and self-supporting opportunities but keep always in view that the home comes first. Then we as a nation are safe.

For a solution of these problems we turn eagerly and trustfully to the public schools. Could we trust them if they did not have a past which assured us of their future worth? During some twenty years of personal experience in coaching partially educated men, women, and children for a business life, people who knew something of everything, people who were exponents of the many different systems taught in both public and private schools, some of them with diplomas covering every subject on earth except the ability to work and the knowledge of how to earn a living, comes this conclusion: that it is really easy to earn a living. The world needs you, and is willing to pay you for just what you are, but the world is in many respects a wise old guy, and will not invest its money in false standards.

I come to this great meeting as a student that I may be able to carry its standard of excellence and its teachings to others from the mother's and the woman's standpoint. Of all the plans and suggestions for the development of the child nothing seems more clear than that presented by Mr. L. L. Summers. From my standpoint it comes nearest the normal

home growth in development of the normal child; it presents an element of growth and propaganda without loss of æsthetic ideals. It is not merely the assembling of mechanical, machine-made parts, but the development of ability. It suggests a normal method of developing and putting into concrete expression the particles of the child's mind by carefully studied degrees in such a manner that he does not exhaust his future powers by constructing things beyond his personal conception. The child is to us the raw material and we have no right to use him to exploit our exhibition work —he feels and knows the cheat, the false pedestal on which we have placed him, and he grows up willing to cheat others in the same way. Permitting the child to develop in the normal or to us artistic manner—it matters not what you call it—does not always win the greatest popularity for the teacher, but it does create a normal human being with parts so delicately adjusted and fused that it may intelligently take its place in the wage-winning world.

I have been able to read somewhat between life's lines, and it seems to me that this is just the kind of a child that the great majority of real teachers would conscientiously produce if they were not bound hand and foot by book-publishers, school boards, and politics. Now the men that compose these bodies are just like other men, and we must admit also that they are our own fathers, brothers, husbands, and sons in many instances. We must also admit that they look at the "women folks" with gentle, loving eyes, when complaint is made, and say, "Nay, dear, that may be true, but you don't understand business principles. Take this money and buy a new bonnet."

Does this dismiss the subject, or does it only tend to make us smile and look pleasant while we formulate our plans for further action?

That child, that raw material, belongs to us, and every time a child, a man, or a woman is misplaced, a mother-heart is aching.

Teachers who do their duty from love of the work do not as a rule receive much credit. They are too busy, with no time for the flourish of trumpets, and most of them are women.

I would not do away with the magnificent masculine manhood of our teaching army—I wish there were more of it; but men and women should complement each other in this great work, they should stand shoulder to shoulder.

Gentlemen, I know hundreds of women who have done more than "see the inside of a shop." I know women who have worked at the bench side by side with uncouth men for the sake of being more thoro in the craft they were trying to teach.

How many men have done much more than "see the inside of a shop"? —that's a good sentence; I am glad I was present to hear it. How many men have served this much-vaunted apprenticeship which is being exploited? You know very well that the best apprenticeship men would not as a rule

be able to pass the academic school examination with its classical frills. Yet they know their craft so well that they are able to smile at mere academic principles.

The normal training as it stands today presents a series of craft fragments and expects inexperienced teachers to piece them together as best they may. Teaching teachers to teach from books is one thing but giving teachers the ability to do things is quite another. The normal schools might do worse than give their teachers half a day in the shops for actual concrete work; then there would be no occasion for such wanton waste of material and effort. Let them learn to cut and contrive, else their efforts will be as wasteful as that of the old woman who made a nightcap out of a sheet.

The old way was: "Finish your work before playing." This method gave cohesive and relative qualities to life. The announcement of a Sunday-school picnic—we had real Sunday schools then—gave to the children and the family visions of a glorious good time, but what did it entail? A new dress for every girl in the family, lunches to be prepared, sewing, baking, washing, ironing, something for every member of the family to do enthusiastically and joyfully, hurry, hustle, bustle, and happiness for weeks before the important event, and happy remembrances forever afterward. As a rule each member of the family and community had created and made an entire article of use or beauty for a definite purpose. Today—but why mention it?—we have caterers—and what else are they good for? It is thus that we have lost the relationship of life-activity; we don't know how to regain it, so we turn it over to the teachers with "that's what they are there for." But the home-makers cannot and must not shift this great responsibility. As in the olden days, the home and school must supplement each other.

Some of you will remember that it is now nearly twenty years since we commenced to battle for the æsthetic element in all work and play. This question has been so ably presented by nearly every speaker that I shall pass it over for other things, for every trade is a craft, and every craft worth entering should be controlled by the ideals of art. You may call it technology, manual training, trade schools, or crafts—it matters not. If the basic principle is well understood and promoted the results will be the same. We must have a knowledge of raw material, its capabilities and possibilities, the same as in colonial sheep-shearing days. Our advanced ideals of how to use this material must be thru good drawing of designs that are adapted to the uses of the material. We must understand the real use of objects made and just how much or how little they may be ornamented without overpowering that usefulness.

My experience in promoting these ideas has proved to a great number of those friends who have been in constant touch with the movement that the field for future activity should be, not in the center of our great seething

city life, but in the rural districts. I would not send hundreds of children into the country every summer for a brief summer outing, altho that is better than nothing, but I would establish a chain of exchange vocational and educational farms in the rural districts, where the raw material may be had almost for the asking and where the activities of real life may be demonstrated just by living them daily. The city child will then go to the country for a purpose and return to us with real ideas and knowledge of duty instead of a false idea that the country is only a place in which to have a good time, thus adding one more link in the chain of unrest that is causing so much trouble at present. Again, I would bring the country child to the city under the same conditions, thus giving to each and every one some choice of life-work.

We commenced this country plan of education some twelve years ago in a quiet small way, for cultured, refined mothers who were left with families to support, and the results have been so satisfactory that we now make bold to give our plans to the world, and where is there a better place to plant the thought than in the National Education Association? Let us work together in this great movement of "art for life's sake" and remember that art is not a thing, not a picture or a great statue, not a wonderful composition or a beautiful song, it is only a beautiful way of doing things. Select your work, give of your best, express yourself in terms of use and beauty, and you are just as much of an artist as the painter—more of one in fact—if it is your great calling to deal with life in its truest and greatest sense.

Art means to build and rebuild, to generate and regenerate, the great motor power of civilization. Fortunately minds will, if given a chance, grow new motor power, consequently new standards are constantly confronting us, but life does not change. We only finish the work of those gone before and as a natural result leave our own unfinished, therefore let it be the best we have to give.

Great revolutionists create no more than a ripple. Every art and science is dependent upon some other art and science. The specialist, to succeed, must know something of each, else his wheels will not balance.

Our woman's clubs, those great universities of unclassified educational advantages, are frequently referred to as freaks of sentiment. I hope this is true and believe it is. Let us always be for sentiment instead of politics. Sentiment should be woman's highest aim—her cherished ideal. There is enough of the prosaic in every life.

For my own part I should rather be able to create a great forceful sentiment, preach and practice it until it enters the hearts of my fellow-men, than be the first woman president of the United States.

It is sentiment that is fast changing the public schools from stagnant pools of decomposed matter, without a suggestion of inner activity, to great whirlpools of light and life and progress.

It is public sentiment that carries presidential elections.

The press, that gigantic power which we all recognize, uses sentiment as its greatest weapon in those bloodless battles for the control of public opinion.

The National Education Association was banded together for the advancement of education many years ago, with many rules and many regulations, but sentiment overcame those paper-made, hide-bound resolutions. Consequently we are greatly indebted to sentiment for the present progressive spirit, wherein we as women may come, as live, active members.

Let us go on creating sentiment. Let us fuse the parts as best we may, for God will direct our efforts in this as in all other things. We shall meet obstacles, but out of chaos will come order.

Art, the great creative and inspiring element of human activity, is today hovering over the industrial life of our people, even as she hovered over the guilds of the past when every workman was an artist-artisan. The only difference between the old and new is that the old centered about the colonial home with its adjacent lands, supplemented by the schools, the new centers about the schools and we hope it is or will be supplemented by the home.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—C. A. Fullerton, Iowa State Teachers College.....Cedar Falls, Iowa
Vice-President—Julia E. Crane, Normal Institute of Music.....Potsdam, N.Y.
Secretary—Arthur G. Wahlberg, supervisor of music.....Fresno, Cal.

FIRST SESSION—Monday Forenoon, July 8, 1912

In the absence of the officers of the department, the first meeting of the Department of Music Education was called to order at 9:50 A.M. by Etta Q. Gee, principal of Franklin School, Chicago, Ill.

A. J. Gantvoort, president of the College of Music, Cincinnati, Ohio, was elected chairman *pro tempore.*

Mr. Gantvoort assumed the chair and called for the paper of P. C. Lutkin, of the Northwestern University School of Music, Evanston, Ill., which should have followed the president's address.

Mr. Lutkin not being present, Will Earhart, director of music, public schools, Pittsburgh, Pa., presented his paper on "A Presentation of the High-School Course Which Was Adopted by the Music Supervisors' National Conference: What It Is and How to Administer It."

At the close of this paper, C. A. Fullerton, Iowa State Teachers College, Cedar Falls, Iowa, who had arrived, assumed the chair as president of the department.

President Fullerton then announced that on account of the delay that had arisen he would omit the reading of the president's address, and instead would make some remarks at the Wednesday morning meeting.

In the absence of Arthur G. Wahlberg, supervisor of music, Fresno, Cal., the secretary of the department, P. C. Hayden, supervisor of music, Keokuk, Iowa, was elected secretary *pro tempore.*

A. J. Gantvoort, president of the College of Music, Cincinnati, Ohio, and chairman of the Committee on National Songs, was then called upon for the report of this committee. Mr. Gantvoort made the following statement:

A committee of three was appointed three years ago, and increased to a committee of nine, which committee made a report at Denver, Boston, and San Francisco. In previous years, the committee has not been able to agree unanimously upon a report, but this year a unanimous report is presented, and, as chairman of the committee, I urge that this report be either adopted or rejected and the committee discharged. Most of the division in the committee has arisen in arriving at a suitable version of the "Star Spangled Banner," but finally it has been decided to leave out all dotted quarter notes.

Mr. Gantvoort then played the adopted version of the song. The committee recommended that the first movement be sung in unison, the second by two voices—tenor and soprano together, alto and bass together—the final phrase, or refrain, being in four parts.

After a brief discussion, a motion to the effect that the report of the committee on the "Star Spangled Banner" be adopted, was carried.

After making some announcements, the president suggested that the discussion on the national songs be suspended until after the reading of a paper on "Musical Appreciation:

How Is It to Be Developed?" by P. C. Lutkin, of the Northwestern University School of Music, Evanston, Ill.

At the conclusion of this paper, the report of the Committee on National Songs was continued with the consideration of "Red, White, and Blue." P. C. Hayden, of Keokuk, Iowa, suggested that the song would be improved and rendered more dignified by eliminating the syncopations wherever they occurred, as in the second and third verses, particularly since the syncopation produced an awkward accent. Edward B. Birge, supervisor of music, Indianapolis, Ind., moved that the song up to the chorus be adopted as reported by the committee. This motion was carried. The chorus was then played thru and on motion the whole song was adopted.

The national song "Hail Columbia" was then taken up, and with very little discussion the version as recommended by the committee was unanimously adopted.

The motion was then made and unanimously carried that the report of the committee as a whole be adopted as the report of the Department of Music Education, and that the version of the songs as presented by them should be officially indorsed by the Department of Music Education.

The following Committee on Resolutions was then appointed:

Frances E. Clark, head of Educational Department, Victor Talking Machine Co., Camden, N.J.
Charles I. Rice, director of music, public schools, Worcester, Mass.
Will Earhart, director of music, public schools, Pittsburgh, Pa.

The president appointed Charles I. Rice, of Worcester, Mass., Fannie E. Lynch, of Chicago, Ill., and Jessie L. Clark, of Wichita, Kans., to serve on the nominating committee.

It was moved and carried that the thanks of the Department of Music Education be extended to the Committee on National Songs, who had given so liberally of their time during the past four years in attempting to formulate a report acceptable to the department.

The meeting then adjourned.

SECOND SESSION, ROUND TABLE—Wednesday Forenoon, July 11, 1912

The meeting of the department was called to order by President Fullerton at 9:30 A.M.

After making some announcements, the president called for the "Report of the Committee on Terminology," and introduced Charles I. Rice, director of music, public schools, Worcester, Mass., and chairman of the committee.

Mr. Rice stated that the Committee on Terminology was appointed in 1906, and had made its first report in Los Angeles, and that it had reported annually at each meeting since that time, usually having its recommendations adopted. Much effective work had been done, the committee having served as a clearing-house where suggestions could be made to bring about the same use of terms in different sections of the country, in which work it is still engaged.

More than an hour was devoted to the discussion of this report, the discussion being participated in by A. J. Gantvoort, president of the College of Music, Cincinnati, Ohio; H. E. Owen, director of music, public schools, San José, Cal.; P. C. Hayden, supervisor of music, Keokuk, Iowa; C. A. Fullerton, Iowa State Teachers College, Cedar Falls, Iowa; and Charles I. Rice, director of music, public schools, Worcester, Mass.

With the exception of sections 3 and 11, which were referred back to the committee for future report, the report of the Committee on Terminology was accepted as presented.

The attention of the department was then called to the matter of the expense of printing the report. The necessity of having funds appropriated by the National Education Association to defray the expense of printing was urged. It was suggested that it

was an imposition upon the members of the committee that they should meet such an expense, and that it might be possible to provide for the same from among the members of the department, if the general Association refused to appropriate the money.

Peter W. Dykema, director of music and festivals, Ethical Culture School, New York, N.Y., then presented his paper on "The Awakening Festival Spirit in America—An Educational Opportunity."

The meeting then adjourned.

P. C. HAYDEN, *Secretary*

THIRD SESSION—FRIDAY AFTERNOON, JULY 12, 1912

The meeting was called to order by the president of the department at 2:30 P.M.

The first number on the program was a paper on "The Making of a Musician" by Eleanor Smith, Chicago, Ill., illustrated by a class of twelve young girls from the Hull House Music School. These young girls presented the following program:

1. *a*) Spring Song . . . . . *Reinecke*
   b) Gondoliers' Song . . . . . *Reinecke*
   THE CLASS
2. *a*) Piano—Hexentanz . . . . . *MacDowell*
   b) Au Village . . . . . *Tschaikowsky*
   MISS ESTHER SOPKIN
3. *a*) The Dark Blue Eyes of Springtime . . . . . *Franz Ries*
   b) The Rosebud . . . . . *Charles Cornish*
   c) O Beautiful Earth . . . . . *Marguerite Mellville*
   THE CLASS
4. Piano—Were I a Bird . . . . . *Henselt*
   MISS GERTRUDE EDMONSON
5. *a*) The Haymaker . . . . . *Dvorak*
   b) Hymn, Jesu Admirabilis . . . . . *Palestrina*
   THE CLASS
6. *a*) Mondnacht . . . . . *Schumann*
   b) Volksliedchen . . . . . *Schumann*
   MISS KATE BURKMAN
7. Piano—Waltz . . . . . *Chopin*
   MISS BLANCHE EBERT

Philander P. Claxton, United States commissioner of education, followed with an address on "The Place of Music in Education."

A program of folk dancing was next given, with the aid of the Victor machine. Students from the Chicago School of Physical Education and Expression gave the following program:

1. Ace of Diamonds
2. I See You . . . Chicago School of Physical Education and Expression
3. Reap the Flax
4. Klappdans
5. Bleknig . . . . . Kramer School of Dancing
6. Shean Trews . . Mr. McClennan, *Premier National Dancer of Great Britain*
7. Shoemaker's Dance . . Chicago School of Physical Education and Expression
8. Schottische . . . . . Kramer School of Dancing
9. The Crested Hen
10. Highland Schottische . . Chicago School of Physical Education and Expression
11. Motor Dance . . . . . Kramer School of Dancing
12. Eightsome Reel . . . Chicago School of Physical Education and Expression
13. Russian Dance (*Kamarinskaia*) . . . . Misses Russell and Layman
14. Hornpipe . . . . . Mr. McClennan

At the close of the program President Fullerton introduced Mrs. Elizabeth Casterton, supervisor of music, public schools, Rochester, N.Y., who spoke of the National Supervisors' Conference, which will meet in Rochester next spring, and urged all supervisors to attend.

C. A. Fullerton, Iowa State Teachers College, Cedar Falls, Iowa, then read his paper on "The Principles of Scientific Management Applied to Teaching Music in the Public Schools."

The Committee on Nominations submitted its report as follows:

For *President*—Will Earhart, director of music, public schools, Pittsburgh, Pa.
For *Vice-President*—Agnes Benson, supervisor of music, public schools, Chicago, Ill.
For *Secretary*—Elizabeth Casterton, supervisor of music, public schools, Rochester, N.Y.

The report of the nominating committee was unanimously accepted.

A motion was then made that the incoming president be empowered to appoint a committee who should endeavor to have the subject of music completely represented on the general program of the National Education Association; and who should devise plans to arouse sufficient interest in the Music Department to secure funds from the Association for proper investigation of music teaching in the public schools.

An amendment to this motion was moved and carried to the effect that C. A. Fullerton, Iowa State Teachers College, Cedar Falls, Iowa, be appointed a committee of one to carry out these plans.

A motion was made and carried urging Commissioner Claxton to print his address and send it out over the country.

The meeting then adjourned.

JESSIE L. CLARK, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

A PRESENTATION OF THE HIGH-SCHOOL COURSE WHICH WAS ADOPTED BY THE MUSIC SUPERVISORS' NATIONAL CONFERENCE: WHAT IT IS AND HOW TO ADMINISTER IT

WILL EARHART, DIRECTOR OF MUSIC, PUBLIC SCHOOLS, PITTSBURGH, PA., CHAIRMAN OF THE COMMITTEE THAT PREPARED THE REPORT

The subject assigned me is very explicit: it calls for a statement of the provisions of the report adopted at St. Louis and for some suggestions regarding the practical installation of the course that was there recommended. These legitimate demands of the subject will be taken up in this order, and, in addition, some argument will be made in favor of the course that is thus presented for your consideration.

The principal provisions of the report we are to discuss are as follows:

1. All study of music, or exercise in music, undertaken by any high school as part of the scholastic routine, shall be credited by that school.

2. The amount of credit so granted shall be equal in every case, hour for hour, to that granted by the same school for any other subject; with this following qualification:

3. All subjects, musical or otherwise, are understood in this report to be on a basis of double or single credit accordingly as they do or do not necessitate a period of study in preparation for each period of recitation. Thus, as applied to music, chorus practice, which requires no preparation, would receive equal credit with drawing, which requires none. On the other hand, each recitation hour in harmony should receive double the credit of each chorus recitation hour, inasmuch as harmony requires preparatory study that can be certified; and again, harmony should be credited, hour for hour of scheduled recitation, equally with mathematics or any subject similarly requiring outside study.

Remaining articles of this report assume the foregoing plan of crediting.

4. We submit the following as desirable and practical courses in music for high schools of the sizes specified:

a) For high schools approximating 100 students or fewer:

Essential offerings: chorus practice, preferably required, may be elective.

Recommended offerings: musical appreciation, elective.

Also, in order of rank, the following recommended offerings (any or all): orchestra ensemble, elective; chorus of girls, elective; band practice, elective; chorus of boys (glee club), elective.

b) For high schools of more than 100 and upward to 250 students, approximately:

Essential offerings: chorus practice, required, required and elective, or elective; musical appreciation, elective; orchestra ensemble, elective.

Recommended offerings (any or all): chorus of girls, elective; band practice, elective; chorus of boys, elective.

c) For high schools approximating 300 or more:

Essential offerings: chorus practice, required, required and elective, or elective; musical appreciation, elective; orchestra ensemble, elective.

Recommended offerings: harmony, elective; counterpoint, elective; chorus of girls, elective; band practice, elective; chorus of boys, elective.

The foregoing articles are quoted literally from the report, but should not be understood as constituting the whole of the report. Many sections have been omitted; and these deal mainly with the organization of the course with regard to the number of hours of recitation per week in each branch, and the number of semesters thru which each is carried. These provisions may be summarized by saying that they are framed so that they either require each student, or make it possible for each student, to gain approximately one twenty-fifth of his total of credits required for graduation thru the study of music alone; and they advise that he be permitted to gain a maximum of one-eighth of his total of credits in such manner.

It is obvious, from what has been read, that certain convictions, either not generally held (if we judge from existing practice) or, at least, not up to this time openly declared for, underlie the report and shape its provisions. It may be of value to state some of the more obvious of these; if not as the entire committee saw them, at least as the present speaker sees them:

1. The study of music in high schools should be serious as well as pleasurable.

2. Voice ensemble (chorus) is not the whole of musical practice, is not the only musical practice possible to high-school students, and should not be the only musical practice offered them by the school.

3. Orchestral ensemble is as distinctly educational, musically and generally, as is chorus ensemble; and the practice of an orchestral instrument is as distinctly educational to the individual as is the use of his voice in singing.

4. An education in music other than applied music (singing or playing) is possible and desirable. By means of it a body of cultured and appreciative hearers could gradually be formed; and all musical practice undertaken by any of these would be illuminated and informed by the knowledge and taste acquired in their general or theoretical study.

5. Musical appreciation (including study of history, biography, form, content, and musical æsthetics) and harmony are subjects of this general or theoretical nature, and are appropriate and desirable for high schools.

The manner of administering the course needs little explanation, surely, except with regard to the work in musical appreciation. Some suggestions are made in the report, under chorus practice, that this include, according to conditions, contributory instruction in sight reading, theory, ear-training, voice management, and musical appreciation; and while the report makes no such suggestion as this next, which is therefore merely a personal belief, I would urge strongly that harmony be more than a mere presentation of the harmonic material. In addition to this, the student should be guided and stimulated to using the harmonic material presented in tasteful and beautiful musical expression. The desire underlying these suggestions is simply that the student be made truly musical. We have all seen that a person may work along lines of musical practice interminably—as a student of piano, violin, harmony, or, most emphatically, of voice—and fail utterly and miserably in becoming a true musician, whose sense of the beautiful may grace a world that is often so lamentably unbeautiful. It seems to be nobody's business, along with all this special teaching, to teach music. The beautiful gets short shrift. It is precisely this function that the public high schools can most appropriately perform. Their aims are still primarily general and humanistic, rather than special and technical, however broad and strong may be the foundations which they lay down under all special musical development. Therefore the cultivation of taste, appreciation, discriminating perception of, and genuine love for the beautiful should, without any sacrifice of technical thoroness and breadth, be the purpose underlying all school study of music. The truly great teachers outside of school are those who, whatever their special work, add this result to their teaching. In the schools, recognition of its importance and validity should never for a moment be absent.

And thus we have come to the subject of musical appreciation, which by its very name is specifically dedicated to the purpose just described. What material is needed for such a course, and how is the study to be conducted? These questions need practical answers.

The material must be compositions by the masters, showing their art at its supreme and most individual moments. Part-songs and choruses from operas, oratorios, and cantatas are available in great numbers, and a goodly list of these is practicable in almost any modern high school. If you are a pianist, or if you can secure the frequent services of a pianist, the world of instrumental music, so different in its ideals from the world of choral music, can be represented. Failing either way, you may still bring this music before your classes by use of the player-piano. If you sing, or can secure a singer frequently, solo songs and many of the great arias can be given. If not, a few of these may be done in unison, and the victrola

may be brought in to present countless others. Orchestral compositions may be studied to good result thru the player-piano; and, if you live in a city blessed by a symphony orchestra, you may lead your students later to the concert hall to hear, now glorified, these same compositions. Special local facilities may lead, occasionally, to other desirable presentations. You may be a violinist; and then the Mendelssohn or the Beethoven concerto would be a possible delightful addition. There may be a string quartet available; and if so Haydn, Mozart, and others could be understood in qualities that otherwise might go unrecognized. The essential factors, however, will always be the voices of the students and the piano, or player-piano. With these alone the course can be made successful in all its essential features.

So much for the material: but it must not be presented in haphazard fashion and without comment. Utterly barren, indeed, would be the educational result if this were the case. And how can the truth be driven home forcibly enough, that here all rests with the teacher. If Felix Weingartner, Frederick Stock, Henry Krehbiel—if any musician of great insight, profound knowledge, supreme musicianship, presented this material thru a series of lessons covering a period of two years, commenting, instructing, elucidating, what a wealth of understanding and appreciation would result! What is to be said about the material? That is the one supreme question. If the teacher is not a true musician in feeling and knowledge, or does not try to become one, there is nothing to say, and the whole course is perfunctory, vapid—a journey without a goal, or a gluttonous devouring instead of an epicurean feasting.

The material, then, must be presented according to some system, in order that certain general truths, judgments, criteria of appreciation, may be left in the student's mind. But no arbitrary system, imposed from without and rigidly adhered to, will give the right quality of result. The systematizing must result from the teacher's power and comprehensive knowledge, which will order all things into their proper classifications because of recognition of their innate qualities and specific traits. This does not mean that no order should be adopted; for instance, a historical one. It does mean, however, that every musical fact is bound up with other musical facts that historically preceded and followed it; and that consequently the musical numbers presented cannot be confined to one age without violence, and also without loss of that very historical perspective which such restriction to a limited historical period is designed to secure. Are you studying Wagner? He cannot be understood without reviewing the history of opera, its ideals and modes of expression, as these existed under the Italian operatic composers, as Glück saw and established them, as Weber modified them; he cannot be understood and estimated unless the subject of orchestral development is thoroly reviewed; again, he cannot be rightly comprehended unless the ideals of instrumental music, with its set

forms and necessary thematic treatment, as this had existed for long years, in opera as well as in sonata and symphony, are understood and sympathetically comprehended. We find ourselves placing Wagner in relation to all that was past and all that was to come. Are you studying Mendelssohn? You cannot explain the present lapse of his piano compositions without reviewing the ideals and manner of piano music before him and referring to the achievements of Schumann, Chopin, and Liszt; you cannot explain the present lapse of his orchestral music without discussing the orchestral manner of Wagner and Berlioz; you cannot judge his oratorios but by a knowledge of what had been done in oratorio before his day; you cannot explain his contemporaneous success and present comparative decline without investigating the rise and development of Romanticism.

Thus historical perspective must be secured in the instance, and must be constantly renewed. It cannot wait upon slow chronological procedure. Further, a material condition presents itself. New students elect, each semester, the musical appreciation class. Unless they number forty or fifty they cannot become a class themselves, for the chorus illustrations, which are most important, demand such numbers. If they join the class already organized, chronological order receives a shock. As a matter of fact, it is not in the least important that it does. You will agree, after some experience. Let them join.

Order, then, is the systematic relating of one piece to another, to a group of others, and to all the remainders of music. As the relationships are in the teacher's head (if at all), artificial classifications are rather a hindrance. However, I would suggest a historical order, as a general outline, since some prearranged plan must be chosen; then let one part of the course refer to, review, be compared with, other parts, sufficiently to make the work live.

In addition to the musical numbers there should be textbooks individually held, where these can be found; for this material is woefully limited. A very fair substitute is a good music section in the high-school library, the public library, or preferably, in both. Grove's *Encyclopedia*, the Oxford *History*, Upton's handbooks, Mathews' *The Great in Music*, Parry's works, books on form, the orchestra, etc., should be available here. Notebooks should be kept, essays, biographical and historical, be written, and examinations should be held. Recitations are more difficult to hold, as the singing, hearing, and discussing of the music fill the recitation hours.

Lastly, it should be borne in mind that the important result is not familiarity with a number of pieces of music but understanding of music in general: its aims or ideals, its laws of beauty, the nature of its appeal to man, and the necessary limitations of its field. Thus, Ernest Newman quotes Burney as saying that music is the only presentative art; all the other arts are representative. An understanding of this saying will reveal the difference in ideals between Wagner and most composers who have come

after him, and those who belong to the older classical school. An essay of Mr. Mathews distinguishes three appeals that music makes: first, to the ear (sense appeal), as "purified, crystallized sound"; secondly, to the mind, as succession, beautiful relation of part to part, established thru the purely mental faculty of memory, without which there could be no recognition of connection, relation, dependence, proportion, and thought or imagination, as exhibited in thematic development; and the appeal to the emotion or soul—a more mysterious, but not unanalyzable appeal. A third investigation that can be made is with regard to the musical idea and the process of musical thought. A fourth reveals the difference between folk music and art music. Out of all these a musical understanding may be developed. The commonplace tune, with its cheap idea and its total lack of any grace of imagination or nobility of thought, is seen to be cheap and brainless; the noisy pound of the ragtime, substituting rhythmic excitement for noble æsthetic pleasure, is stripped of its courtesan rouge and tinsel, and shows its meretriciousness and vulgarity. The result does not come at once; it does not come always. But it does come in measure, and in that measure it justifies any conceivable effort.

MUSICAL APPRECIATION—HOW IS IT TO BE DEVELOPED?

PETER CHRISTIAN LUTKIN, NORTHWESTERN UNIVERSITY SCHOOL OF MUSIC, EVANSTON, ILL.

There are few phrases, indeed, open to such a wide latitude of definition as the phrase "being musical." In its narrowest sense it means a susceptibility to the charms of music, even if the music is of rather an ordinary type. In a larger sense it means a natural or acquired appreciation of music in its higher aspects, and more particularly of the kind of music known as "classical." Without "being musical" one can never arrive at a true understanding of the real worth and beauty of music. Nor can music cast its beneficent spell over natures that are unresponsive or unsympathetic. To become "musical," then, is a most desirable consummation and it is the object of this paper to suggest ways by which musical appreciation may be developed, especially in our public schools.

Music by virtue of its intrinsic merit has gradually won its way to a recognized position in the educational world. It is no longer necessary to explain its intimate relation with life, its value as a refining influence, its worth as a disciplinary force, or its commanding position as an art. We have arrived at that stage of development where we are seeking the best methods of presenting it to the young, in order that the rising generation may come into the rich heritage that awaits an awakened musical sense.

We must not forget that the processes of art are quite the opposite of the processes of science. Art is not the result of scientific procedure.

On the contrary, it is the product of highly endowed natures answerable at the time to no known laws and conforming to no preconceived plan. Science laboriously explains these creations of genius, formulates from them rules and principles which hold good until a new genius expands the old laws or invents new ones.

Now education in music must follow the same general plan; that is, music must first be presented as an art, the science to follow as soon as the mind has some adequate comprehension of the art. Up to comparatively recent times, music in our schools has been taught more as a science than as an art. The mechanical and unattractive symbols of music have been forced into the immature brains of our young children before their import was understood and often to the detriment of a love of music for its own sake. It is maintained that our children are sent to school too young, that if their entry were delayed a year or two the maturer minds would easily make up the lost time and would assimilate their newly acquired knowledge far more thoroly. The same principle certainly obtains in the study of music, and a knowledge of the notation of music may well be put off until the child has stored within him a feeling for chord and scale intervals and until his sense of rhythm has been quickened by an intimate acquaintance with varied examples of time combinations.

We start, then, with the proposition that the child, in order to become musical, must become familiar, either actively or passively, with numerous examples of good music. The active participation, as in singing, will naturally concern itself with simple material in order to meet the limitations of the child's executive ability. The passive participation, as in listening, is not so restricted, for a child can grasp and æsthetically comprehend music far beyond its ability to perform. In fact, the receptive capacity of the young is usually underrated. Their tastes, if unformed, are at least unspoiled. They have no prejudices to overcome and no preconceived ideas to combat.

Unfortunately "house music," as the Germans style it, is little cultivated in this country. In American homes it is indeed rare that music-making is pursued as a family function or that any direct effort is made to establish a love for good art in any direction. Even if the parents are musical, they are apt to turn over the musical education of the children to the music teacher or the school. The prevailing music in American homes is of a cheap and vulgar character. Our pianos are littered up with dance tunes and popular songs whose artistic value is well indicated by the atrociously colored title-pages. Participation in either vocal or instrumental concerted music, that most delightful and improving occupation, is a form of enjoyment almost unknown among us. We still have to learn in our homes that there are other voices than the melody and other instruments than the piano.

If the home offers so little encouragement for musical culture we must turn to the school, and here, fortunately, we find a much more promising

state of affairs. Thanks to those in charge of the education of our youth, the value of music as an element of culture has been generously recognized, and few indeed are the places where some provision for its study has not been made. Many excellent textbooks have been published, the work of skilled musicians. But, as has been already intimated, the emphasis has been laid upon theoretical instruction. Happily there is a reaction in some quarters and the newer books are devoting more and more space to "art-songs," so called. This is excellent so far as it goes, but if we are to develop a truly musical nation the child must have a wider musical experience than he can cover in his own singing. He must have good music and much good music presented to him thru the medium of hearing. Exquisite enjoyment may be experienced by contemplating a rose and inhaling its fragrance without the slightest knowledge of its structure from the botanist's point of view. In like manner, the more attractive pieces by the great composers can, if judiciously presented, give great pleasure without the slightest knowledge of their structure from the theorist's point of view.

The practical question arises, "How are we to supply our school children with music calculated to enlarge their horizon outside of the music they themselves perform?" The situation has its difficulties, but they are not insurmountable. The writer, in preparing the music for one of the children's concerts of the Chicago North Shore Festival Association in which fifteen hundred children participated, had an experience which made a great impression on him at the time. In the course of his rehearsals he visited one of the South Evanston schools. It was at the beginning of the morning session. The children, fresh and vigorous, were entering the school building. On ascending to the upper floor, a young lad was noticed seated at an old square piano on the half-landing. Promptly at nine o'clock there was absolute silence thruout the building and the young pianist played a little piece quite acceptably. Suddenly it flashed across the mind of the writer, "What an opportunity to make all these young school children truly musical." Here were several hundred children, glowing with health and good spirits after their morning play, in the most favorable receptive condition possible, listening intently and with evident enjoyment to the music they heard. Imagine substituting for the young lad, the old piano, and the unpretentious piece of music a talented and experienced player, a good piano, and music chosen with a well-defined, purpose! Such a musical diet, fed to the children but five or ten minutes daily thruout the grammar-school period would go far to transform any nation into "being musical." Eighth-grade children would distinguish Mozart from Beethoven, Schumann from Chopin. They would be familiar with scores of selections from symphonies, oratorios, and operas. Think what an audience such a plan would prepare for our future classical concerts, if it were once carried out in any comprehensive and thorogoing way!

But like all problems having to do with fundamental improvement in the human race, it is not so easily worked out. Gifted performers and good instruments are not always available, nor are the services of an experienced musician to plan out such a course. As for the performers, here is work, and grand work, for the numerous amateur musical clubs thruout the country. In most towns of considerable size, such organizations exist and they embrace in their membership most of the piano-playing and singing talent of the community. These clubs should supply the necessary performers without expense to the public schools and the co-operation of prominent musicians could doubtless be obtained to outline the programs of music.

There is even a more practicable plan than the above to bring music before the children in a larger way, and this is by means of phonographs or mechanical piano-players. These agencies for the reproduction of music seem to have entered the field at a psychological moment. Musically, we are in a peculiar condition in these United States of America. In certain directions we have made enormous strides in the past thirty or forty years. A generation ago we were looked down upon as an unmusical nation. Today the finest orchestras and perhaps the finest operatic productions are in this country. A quarter of a century ago American musicians had practically no standing in Europe. Today they occupy prominent positions as performers and teachers in the old-world capitals. Well-informed people are disposed to think that pedagogical methods with us are decidedly in advance of those in Europe. But all this advance is largely confined to students of music, either professional or amateur. It has not as yet permeated thru to the people at large. The crying need of America at present is an appreciative public to patronize her rapidly growing list of native musical artists, a public trained to enjoy music in its higher forms and trained to exercise a discriminating judgment.

The phonograph and the piano-players bid fair to bring this desired condition of affairs to pass, for they supply ready-made music, so to speak, for the masses. It must be confessed that up to date the music of the comic opera and the vaudeville stage hold first place in the output of rolls and records, but there is an encouraging increase in the demand for music that comes under the dread term of "classical." A certain number of people desirous of improving their musical taste are trying out classical selections to find out if they are really as "bad as they sound," to quote an American humorist. But it is in the schools where the grand opportunity lies. These mechanical music-makers can serve an invaluable purpose here in acquainting the children with a wide range of music. The phonographs, altho deficient in reproducing many phases of instrumental music, are more practical than the piano-players. They cost less, are portable, and give examples of both vocal and instrumental music. The only objection that can be brought against their use is the fear that

they will be used as entertaining toys rather than as a medium for musical education. Children need to be taught above all things that music is more than a mere amusement, that in its truer expression it appeals to both intellect and emotion, and that an understanding of the complexities of great music is as much of a mental achievement as an understanding of the higher forms of literature or science.

While the study of music is richly worth while for its own sake, there is a negative side to the subject that deserves serious consideration. Wholesome entertainment is one of the great needs of our twentieth-century civilization. The most frequented forms of public amusement—the theater, the vaudeville, and the moving-picture show—all have a decided tendency to lower moral standards. The most sacred relations of life are made light of and all the crimes of the Decalog, save murder, are at times held up to ridicule. Language is used and ideas suggested that we would not for a moment tolerate in our homes, yet these performances are patronized and supported by all grades of society. So-called "advanced" ideas of sex relation are exploited and substantially advocated, yet we permit our young people to attend without a protest.

While an early injection of the musical microbe may not cure all our social ills, the pursuit of music unquestionably tends toward a love for the pure and beautiful. It is an excellent counterirritant for the feverish restlessness of the age. It invites contemplation and introspection. It expands our emotional life and sharpens our sense-perceptions. It keeps alive our finer sensibilities which are so likely to become dulled and deadened with the sordid contact of everyday life.

There is still another reason, if a less ethical one, why our children should receive sound and effective training in the art of music. The older arts, painting, sculpture, and architecture, seem in a sense exhausted. Their greatest masters belong to bygone days. Music, on the contrary, is in the midst of tremendous development—some of her greatest masters belong to modern times. Technical mastery, as regards both performance and creative ability, is at a marvelous stage of proficiency. The capacity of the human ear has increased enormously in assimilating complex combinations of sounds. It is becoming more and more necessary that one have special preparation to grasp and comprehend this wonderful art, this distinctive product of modern civilization, which typifies in artistic guise the involutions and intricacies of twentieth-century life. Surely we owe it to the rising generation to give them every opportunity for appreciating the art of the day.

THE MAKING OF A MUSICIAN

ELEANOR SMITH, CHICAGO, ILL.

A protest sometimes made by grade teachers and superintendents against the more artistic ideals of music teaching in schools is that we are trying to make musicians of the children. The fault of the specialist's view is undoubtedly to overestimate his importance to the general scheme, but as yet the place of music in our curricula is too insignificant to give cause for concern on this score.

At present the average teacher of school music is expected to furnish special music for all occasions, to prepare cantatas and operettas, to train children's voices, to teach the technique of reading and writing, to give ear-training, and to co-ordinate songs to other subjects of the school program. The time allowed for these activities is from thirty to ninety minutes weekly.

It may be truly said that quality in teaching is more than quantity, but when we realize that instruction in at least one-half of the schoolrooms of the country is given by teachers without musical ability or training, we are forced to conclude that at least half of this instruction is little better than no instruction at all.

Granted that the musician has a function in the community as significant as that of preacher or plumber, the conservation of talent seems an important matter; but while much is said about the conservation of our natural resources, while societies are formed to protect birds and forests, there is little real concern for the nurture of artistic resources, so precious to older nations.

The schools of the country, the only democratic ground for the fostering of talent, too often fail in this regard. Paltry ideals are a cord for the strangling of genius; cheap music is its scourge, mechanical methods its death warrant. The fantastic belief that children are made technically invincible thru the enjoyment of rote singing is its poison cup. And of all the foes of talent, especially of vocal talent, perhaps none is more fatal than the implacable patriotism which so often cracks the throats of infancy with burdens like that of the "Star Spangled Banner."

It is sad to think of what becomes of all the tender shoots which might flower so sweetly in the schoolroom under wise guardianship. Bound in so many cases to extinguishment later in the dust and heat of factories and workshops, these ideal strivings might long survive if teaching were better and music more pure.

But imperfect as is the music of the schoolroom, it is the one widespread popular agency which can be enlisted for the making of the musician. Church music undoubtedly does much for individuals, but the effect of that other great popular influence—the music of entertainment—is almost always debasing. The good concerts, of which there are so many in our large

cities, appeal to a very small public. The opera, with its high prices, is not for the very poor, nor even for those whose purses are less narrow. The cheap shows, the vaudevilles, and the moving-picture entertainments contribute very little which can instruct or elevate.

Until recently, therefore, all serious work in the conserving and development of talent was done by private teachers and by the conservatories and music schools thruout the country. That many of these institutions are completely commercial in spirit is too true, and the pupil is often the prey of the unscrupulous instructor, whose only fitness for his work is a meretricious virtuosity.

It is true that many good music schools give scholarships and that most private teachers are glad to grant reductions to an occasional pupil, but the fact still remains that up to a few years ago there was no possibility outside of private munificence or occasional charity of a poor pupil's receiving a thoro musical education.

During the past fifteen years, however, a much-needed institution, the settlement music school, has made its appearance in this country. The largest and best of these are endowed, for no musician dependent on his own activities for a livelihood could long live from fees collected in such an institution. In nearly every case these schools have their beginnings in connection with settlements.

The Hull House Music School, which is the oldest of the group, had perhaps the most unclouded beginning, having been founded thru the generosity of Miss Mary Rozet Smith, a trustee of Hull House. The New York Music School Settlement, the largest and richest of all, had its beginning in connection with a college settlement, tho for a number of years it has had a separate existence.

These schools teach singing, the piano, the violin, and, in some cases, the organ, and form orchestras and choral classes. The fees are nominal, being in some cases about one-tenth of the market price of instruction received.

At Hull House our object is to give as many children as our facilities allow a thoro musical training. As we insist upon a good general education for our children, we find our chief obstacle in the industrial conditions which send children to work at fourteen; but if the Hull House Music School has done nothing else worth recording, it has at least helped to keep many children in school. To do this, of course, requires much education of parents.

The greatest advantage which we enjoy in our work is the sincere love of music which we meet in parents and pupils. This is not always unmixed with the realization that music lessons for the children, like Nottingham lace curtains and plush furniture for the parlor, stand for a certain social advance.

But music is, as it has always been, the chief delight and solace of the

poor, and her most ardent votaries as well as those high in her service have always been the poor. A realization of this fact, and the conviction that music has supreme power to refine and elevate those who embrace it, lay at the foundation of our efforts to create a democratic school of music.

The successful direction of a musical education requires somewhat the kind of mental attitude necessary to skillful cookery; knowledge, taste, and a general view of the subject must before all things be present. To cultivate technique without for a moment imperilling expressiveness; to know good material and be able to adapt it to the purpose of the moment; these are as necessary to the good teacher as are quickness, skill, and the ability to keep half a dozen things going at once to the cook. We all know how soon the steak will burn to a cinder if the seasoning of the vegetables absorbs too much attention; how the omelette will fall and the cake flatten if conditions for fluffiness and lightness fail at the critical moment thru attention to other details.

I once heard some children formulate their teacher's theory of piano instruction thus: "Our teacher ain't like other teachers; they just believe in technique, but she believes in soul!" This noble sentiment was embodied later in the performance of a piano piece in which the left hand shook all responsibility for the four sharps in the key while the right manfully grappled with them.

The artistic ideal which animated the founders of the Hull House Music School was one of harmonious development of the intellectual, emotional, and technical in music. All instructors were imbued with the same spirit, and co-operation between departments was assured from the beginning. All children entering the school were required to attend classes in singing because it was believed that the work done here in note-reading, ear-training, writing, vocal development, and song interpretation, would strengthen the pupil for his study of an instrument. The necessity for piano lessons for the vocalist was equally clear. In short, it was believed that, as the German saying has it, "One hand washes the other." Only children with a normal ear were admitted, and those who showed talent and applicati n in singing classes were recommended for full tuition.

This plan has worked out admirably. A considerable degree of advancement has been accomplished in the instrumental departments, but in no case has there been technical growth without artistic and intellectual growth. The young people who play the most fluently are those who do the best work in theory, who most quickly grasp tonal relations and see thru rhythmic problems. That this is not commonly the case is a familiar truth. How many accomplished pianists we have known by whom the study of harmony was approached with fear and dread and who could never learn to distinguish by ear between the simplest musical forms.

As to vocalists, they are a byword and a reproach among their fellows. The singing teacher is the only reputable music master who takes no respon-

sibility as to the musical foundation of his pupil's education. This education, elaborate and expensive, often collapses miserably when confronted by the practical requirements even of choir singing or teaching.

But we all realize that the making of a musician is not only a matter of the ideal and interest of the teacher. The musician must truly make himself, and pity is how seldom talent and opportunity fall to the lot of students who have the character and steadiness to do their part. George Henschel's rejoinder to the remark made to him that "there are so few good teachers," is historic. "Plenty of good teachers," said he, "but how few good pupils." Rare as are both good master and good student, their meeting is still more rare. It is the result of this happy meeting that we greet in the real musician, the modest child-like man or woman we have all known and revered. No one who knows the power of music can question the value of the musician to the social fabric of which he is a part. Even when he was despised and rejected, when he ranked with acrobats and servants, his contribution was respected. And it is doubtful whether the simplicity and ideality of the good musician was ever more needed in the world than they are today.

THE PRINCIPLES OF SCIENTIFIC MANAGEMENT APPLIED TO TEACHING MUSIC IN THE PUBLIC SCHOOLS

C. A. FULLERTON, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA

One of the most significant movements of the present generation is what is known as scientific management. It is concerned largely with big manufacturing establishments and other commercial enterprises. Its general aim is to increase the efficiency. By applying the principles of scientific management, the quality of the laborer is improved, the quantity is greatly increased, and the laborer is in better condition after his day's work. The result of this is that in the factory the workman gets better wages, the company gets more work done for its investment, and the public gets the product at a cheaper price. Scientific management is new. Some of its principles were first discovered about thirty years ago, but it is only during the last few years that it has been reduced to a science and applied very widely.

The most astonishing results are found in such simple and time-honored occupations as shoveling dirt and laying brick. Notwithstanding the fact that millions of men in the course of the world's history have earned their bread as expert bricklayers, it was left for an enterprising American of our own generation to make a scientific study of the process. With stop-watch in hand, he reduced the entire operation to simple "motion units" and made the sensational discovery that the eighteen motions made by a standard workman in laying a single brick could with the co-operation of a

cheap laborer be reduced to five. By eliminating the thirteen extra motions and training the workman in the remaining five, he made a tremendous gain in the number of bricks laid by each man per day. Similar results have been obtained in other lines. By careful experiments, it has been found that a laborer shoveling dirt will do a maximum of work with a minimum of energy if he lifts about twenty-one pounds on his shovel at one time, and the men who have learned to do this and who have submitted themselves to the training of the "efficiency engineer" so that they could do it in the most economical way, have had their wages increased to such an extent that they have been completely reconciled to the innovation.

But it is not alone in these elementary types of work that the application of scientific management is bringing such surprising results. The more complex operations have furnished an equally good opportunity. A stop-watch study of the movements of the entire force of workers, including clerks and stenographers, has often taken a factory that was running at a financial loss and enabled it to declare handsome dividends.

The first step taken in establishing scientific management is to conduct a searching investigation. One of the most skillful workmen is selected for the experiment. The waste of time and energy is located, the simple unit motions are determined, and the one best way of performing the task is, after exhaustive experiments, decided upon. This is then reduced to writing and prescribed for general use. Then follows the training of the workers to master the standardized methods.

Our chief concern with scientific management at present is this: What has it to offer in the way of increasing our efficiency as teachers of music in the public schools? The more we study it, the more I believe we shall be convinced that it has a great deal to offer for the improvement of all educational work. The fact that we are dealing with immortal souls instead of brick and steel is no argument in favor of false motions and clumsy methods. If we can learn something of value from these manufacturers, why not do so? The multimillionaire who has kept an expert scholar on high salary for five years in order that he might minimize the waste in a large factory has his reward, of course, in increased dividends, but incidentally he may have made a valuable contribution to education. The efficiency engineer who spent fifteen years, sometimes with two or three high-salaried assistants and with the co-operation of the leading mathematicians of the country, in seeking a solution for a very complicated problem in mathematics may not have contributed anything to pedagogy when he evolved a method by which a skillful mechanic could solve the problem in less than thirty seconds. But he furnished an exhibition of faith and persistence that should not pass unnoticed by the educator.

I am not assuming that the educators of the country are in the rear in the general march of progress, but I covet for the higher interests of the boys and girls all the aid we can get from all sources, and it is obviously true that

where dollars and cents are at stake there is a persistent interest in increasing efficiency and reducing waste that is worthy of the noblest cause. Instead of decrying the commercial prosperity of our country and the enthusiasm for increasing wealth, we can better improve conditions if we as educators put ourselves in possession of all the knowledge and skill which is being used so effectively in the commercial world, if it can in any way increase our efficiency.

Increasing competition compels the factory management to search eagerly for the best way of doing things. Their success depends upon their finding the best way. If these factory men have been more successful in eliminating waste than we have, we should not resent it. If a considerable proportion of the rural citizens of our country are better posted in regard to expert care of hogs than expert care of boys and girls, the fault is in them, not in the hog department. If the farmer's hog begins to walk crooked there is a stir in the camp, and if help cannot be secured nearer home, he communicates with the government at Washington and an expert is hurried to the scene on the next train with the best that the twentieth century offers on the care and treatment of hogs. It is a pathetic fact that sometimes the farmer is not so keen to detect a variation from the best interests of his sons and daughters. His training has not been such as to prepare him to judge quite so successfully as in the case of the hog, and the fault is not entirely his. In times past, he has not received much stimulus from Washington in regard to the best interests of boys and girls.

Now scientific management is not on trial. It has already established itself in the factory and is making rapid progress in agriculture. Indirectly the spirit of scientific management has done much for education, but the progress that we have already made is not the topic before us at present. We are clearly running our schools on a lower plane of efficiency than we are some of our factories. As a nation we cannot afford to do this.

As sure as the daylight follows the dawn, this higher standard of efficiency will be applied to all phases of education, including religious education, and the sooner the better.

The "efficiency engineer" who sets out to apply scientific management to music teaching will have no easy task, but he will have a tremendously important one, and the fact that it is difficult is no reason for backing away from it. Broadly speaking, the process will consist of two phases—the elimination of what is not worth while, and learning the most efficient way of doing what is worth while. Now with fifteen to twenty minutes daily devoted to music, what would the scientific expert do? If he teaches a child a song, what kind will he select? His fellow-laborer over in the agricultural department has worked for a whole generation to determine what constitutes the best ration for a hog. His problem has been to find what has the best effect on the hog. The teacher's is to find what has the best effect on the child. The answer to the one is expressed in pounds

of pork. The answer to the other is expressed in ideals, in human happiness, in character, in citizenship.

The efficiency expert would then discriminate finely between the good songs and the best songs. The cheap and the indifferent music would find no place in the building of this citizen of the future. If every song learned must prove its right to a place in the child's life by possessing enough musical and poetic beauty to give it lasting value, what will the scientific expert say of the countless exercises written by the yard to serve as a means for teaching children to read music? He is a scientist, therefore unprejudiced. The exercise and the song will be given an impartial trial —a test as searching as that used by the pure-food expert. A negative test which merely proves the absence of poison is not sufficient. There must be positive value there. A farmer might feed his stock on a mixture of meal and sawdust, but there is no argument in favor of using the sawdust.

To determine the best method for teaching sight singing is an inviting problem for the efficiency expert. It includes all that there is in a bricklaying problem and much more, for technical skill is only part of the object sought. One reason why better progress has been made in reducing the technique of the factory to a scientific basis than in the technique of public-school music is that success in the technique of the factory is measured by dollars and cents and the results are not questioned. It is not so easy to measure success in the development of an art—in the appreciation of beauty. Technical skill in the factory means the ability to turn out so many articles per day. Technical skill in music means the ability to perform music, but its value depends on the power to interpret music in an artistic manner and also on the taste used in selecting music that is worth performing.

If the United States could employ an efficiency engineer for a period of five years to make a scientific study of music education in the public schools, there would be some marvelous revelations. The position would be very exacting, for he would need to be a thoro musician, a psychologist, an expert teacher, and a thoroly trained scientist. There would be much left undone at the end of five years, but there would be much accomplished. If he were to devote all his energy to eliminating what is not worth while, and learning the best way of doing what is worth doing, he would blaze a path in advance of any phase of education in the public schools. Then if he were to take five years more and apply the principles of scientific management to music education in general, including the nickel theater, the ragtime on the street, in the homes, and in the Sunday schools, he would start a movement that would mean more to America than any tariff legislation that has ever been enacted or ever will be.

ROUND TABLE CONFERENCE

REPORT OF COMMITTEE ON TERMINOLOGY

To the members of the Department of Music Education of the National Education Association:

The subjects which were referred by the Department to the Committee on Terminology were pulse, beat, after-beat, half-beat.

PULSE AND BEAT

The committee finds that the words "pulse" and "beat" are in general use as synonymous terms, meaning one of the succession of throbs or impulses of which we are conscious when listening to music. Each of these pulses or beats has an exact point of beginning, a duration, and an exact point of ending, the latter coincident with the beginning of the next pulse or beat. When thus used, both words are terms of *ear* and of feeling.

BEAT

One of these words, "beat," is also in universal use, meaning one of a series of physical motions by means of which a conductor holds his group of performers to a uniform movement.

When thus used it becomes a term of *eye*.

The conductor's baton, if it is to be authoritative, cannot wander about thru the whole duration of the pulse, but must move quickly to a point of comparative repose, remaining until just before the arrival of the next pulse, when it again makes a rapid swing, finishing coincidently with the initial tone (or silence) of the new pulse.

Thus it is practically the *end* of the conductor's beat that marks the *beginning* of the pulse.

The committee is of opinion that "beat" might preferably be used as indicating the outward sign.

AFTER-BEAT

The bandmaster's direction, "Play on the beat," is correct, meaning just what it says; but when he says to the same player, "Your note is a beat-note," he is not so exact.

The terms "beat-note," "after-beat note," and (to a limited degree) "before-beat note" are in use by teachers and conductors, and are all valuable. To the bandmaster "beat-note" means the note that must be attacked at the instant of his beat or count. It is entirely a matter of position in the printed measure and not at all a matter of note value.

BEAT-NOTE

This term "beat-note" is already in use in another important connection (see "Terminology Report," 1911) and the committee recommends that those using the above terms shall say: "This note is an on-the-beat note; this one is an after-the-beat note; this one a before-the-beat note."

DEFINITIONS

MATTERS OF EAR

Pulse.—The unit of movement in music, one of a series of regularly recurring throbs or impulses.

Measure.—A group of pulses.

Pulse-group.—Two or more tones grouped within the pulse.

MATTERS OF EYE

Beat.—One of a series of conventional movements made by the conductor. This might include any *unconventional* motion which served to mark the movement of the music, whether made by conductor, performer, or auditor.

Beat-note.—A note of the denomination indicated by the measure-sign as the unit of note-value in a given measure. *Example:* Given the following measure-signs, 2-4, 2-2, 2-8, quarter, half, or eighth notes, respectively are beat-notes.

Beat-group.—A group of notes, or notes and rests, of smaller denomination than the beat-note, which represents a full beat *from beginning to end* and is equal in value to the beat-note. (A beat-group may begin with a rest.)

On-the-beat note (or rest).—Any note (or rest) ranging in value from a full beat down which calls for musical action (or inaction) synchronously with the conductor's beat.

After-the-beat note.—Any note in a beat-group which indicates that a tone is to be sounded *after* the beginning, and *before* or *at* the middle of the pulse.

Before-the-beat note.—Any note in a beat-group which indicates that a tone is to be sounded after the middle of the pulse.

To illustrate terminology and to differentiate between "pulse" and "beat" as terms respectively of *ear* and *eye*, the following is submitted:

Whenever a brief tone involves the musical idea of syncopation, it may be regarded as an *after-the-pulse* tone, and the note that calls for it as an *after-the-beat* note; when it involves the idea of anticipation or preparation it may be regarded as a *before-the-pulse* tone, and the note that calls for it as a *before-the-beat* note.

MEASURE AND METER

"What is the measure-sign?"

"What is the meter-signature?"

These two words are used synonymously, and one of them is unnecessary. The committee recommends that "measure" be retained and used. "Meter" has its uses in connection with hymns.

UNSHARPED AND UNFLATTED

"Sharps and flats make staff degrees represent pitches a half-step higher or lower, respectively, *than are represented by unsharped or unflatted degrees.*"

Instead of the italicized phrase the teacher who uses the noun "natural" as the name of a well-known character will say—"than are represented by degrees in natural condition."

The committee suggests to those who use "cancel" as a noun, the use of "primary" as an adjective. It is the clef which gives the degrees their first definite pitch meaning, and "primary" seems to fit the case exactly.

The teachers to whom "natural" is objectionable can thus free their terminology from the undesirable negative statements.

ILLUSTRATION FOR BELIEVERS IN "NATURAL"

In the staff representation of the key of G major, the fifth line and its octaves are *sharped*, all other degrees are in *natural* condition.

ILLUSTRATION FOR BELIEVERS IN "CANCEL"

In the staff representation of the key of G major, the fifth line and its octaves are *sharped*, all other degrees are in *primary* condition.

SUBJECTS FOR DISCUSSION IF TIME ALLOWS

Divided beats versus two tones to the beat.

Divisions of the pulse versus groupings of tones within the pulse.

Respectfully submitted,

Charles I. Rice, *Chairman*
P. C. Hayden
Wm. B. Kinnear
Leo R. Lewis
Constance Barlow-Smith

THE AWAKENING FESTIVAL SPIRIT IN AMERICA—AN EDUCATIONAL OPPORTUNITY

PETER W. DYKEMA, DIRECTOR OF MUSIC AND FESTIVALS, ETHICAL CULTURE SCHOOL, NEW YORK, N.Y.

I. PRESENT CONDITIONS

The traveler passing thru the city of Philadelphia today sees from his train a large billboard which informs him that early in October the city will present a great pageant, in which the significant events connected with that historic locality will be presented by no less than 5,000 performers. If he is of a reflective turn of mind, and has followed closely this line of work, he may begin to ruminate on the significance of this announcement. He may first of all recall the series of notable pageants which have already taken place in this country: the auspicious beginning at Boston in 1908 with the Pageant of Education; the great panorama of events at the Quebec Historical Pageant; the grand processional Founder's Week Pageant in Philadelphia; the exquisite Pageant of the Renaissance given in 1909 by the artists and students of the Chicago Art Institute; the Pageant of Illinois at Evanston in the same year; the Pageant of Westchester County, N.Y., and Boston's Pageant of the Perfect City, in 1910.

Leaving these large community affairs, he may recall the pageants of small villages such as Deerfield, Mass., with its moving picture of old French and Indian days; Ripon, Wis., with its story of settlement and pioneer life; Peterboro, N.H., interweaving the simple events of its career with the noble music which Edward MacDowell composed there; Northhampton, Mass., with its plain but impressive drama of local development; Thetford, Vt., realizing in the presentation of its pageant not only the rich heritage of the past, but awakening to the unused opportunities of the present and the bright possibilities of the future, thus sounding strongly the note which largely differentiates American from English pageantry—the necessity of including industrial conditions in a representative scheme.

There may also pass before this well-informed traveler remembrance of some of the twenty or more celebrations of this present year—the Patriots' Day Celebration at Charlestown, Mass., on April 19; the Union College Pageant at Schenectady, on Memorial Day; the quaint reproduction at the same time at Croton, N.Y., of old Dutch days on the Hudson; the historical pageant at Brattleboro, Vt., early in June; and so on to other places such as St. Johnsbury, Vt., Newton Centre, Mass., Portland, Me., Billings, Mont., Frostburg, Md., Roxbury, Conn., Columbus, Ohio, Edwardsville, Ill., and others which are in the midst of pageant preparations.

From these occasional or special celebrations the thoughtful mind may pass on to consider the changes that have been wrought during the past few

years in our Fourth of July celebration. Repression or elimination of explosives and danger has been only one phase of the movement; the necessary substitution has largely been supplied by pageantry. The afternoon sports of these safe and sane celebrations, involving organized tableaux, sham battles, games, and folk dancing, call attention to the fact that the playgrounds and schools have of late been affected by certain elements in these large pageants. Play and gymnastics no longer consist merely of Swedish exercises, wand drills to music, and games such as basket-ball and the like. Folk dancing—miniature drama as it is—has invaded the land, and like the Pied Piper of Hamelin has led all the children willing captives in its train. Moreover the symbolic dance has made its way into many programs.

The schools and settlements thruout our land have all been more or less affected by the dramatic spirit; the festival idea is sweeping the country. Let us look at some of the more significant manifestations. A recent report on the work in a typical New York City public school states that, besides celebrating the principal holidays of the year with some play, festival, or special exercise, the regular assemblies and even the class recitations make frequent use of dramatic work. In the list of material are found dramatizations of stories—such as Cooper's *Spy*, Longfellow's *Hiawatha*, Hawthorne's *Wonder Book*, and Browning's "Pied Piper"; dramatic versions of great historical incidents, such as the signing of the Magna Charta, and the Boston Tea Party; and original scenes embodying general ideas, such as the main virtues of kindness, obedience, etc. Occasionally the parents are invited to something elaborate enough to be called a pageant. One such was given by the Little Mothers' League in which the children of a lower East Side school portrayed the mother caring for her little child according to the customs in Palestine, Greece, Rome, Japan, China, in Indian North America, and on down to modern conditions. In a recent list of plays given in schools and settlements thruout the country are no less than one hundred and fifty different titles of plays, ranging from the simplest cantatas, fairy plays, comedies, and farces, to involved dramas by Shakespeare, Tennyson, Browning, Ibsen, and the modern playwrights.

In addition to this work in already prepared material much has been done with original material. I may cite original student plays at the Western High School, Washington; the unique Appreciation Day given annually by 2,500 or more students in the Washington Irving High School, New York City; the Indiana Historical Pageant produced by the English classes of the Shortbridge High School, Indianapolis; and various festivals given by the children and practice teachers at the Kalamazoo, Mich., Oshkosh and Ripon, Wis., and Winona, Minn., normal schools. I might also include the beautiful spectacles in some of our colleges and universities, such as the exquisitely beautiful masque of womanhood produced this spring at Berkeley. And I should be unfair to the situation as a whole if

I did not mention the Ethical Culture School, New York City, in which for many years past constant attention has been given to the producing of festivals as a part of the regularly scheduled work thruout the year in every part of the school from kindergarten thru high-school and normal departments.

This is a sketch of recent developments; it is incomplete for it has neglected some important phases. But what has been written is probably enough to show that our country is permeated with pageant and festival activity, that more than ever before serious attention is being given to various kinds of dramatic representation both from the point of view of spectator and of actor.

II. THE CAUSES

Let us now endeavor to ascertain some of the causes of this festival activity. We may classify them under three by no means mutually exclusive headings; namely, (A) the industrial, (B) the social, and (C) the educational causes.

A. *Industrial.*—Under the industrial causes we may mention the great tension at which work is being done today. Consequently, with the worker, too tired to think of ways to amuse himself, too limited in space for the natural games and recreations of adults, and provided with ready money with which to purchase admission to something that will entertain him, it is not surprising that, on the one hand, there should be an audience to greet any festival performance; and on the other hand, there should be need of recreation which is so organized that it responds to the condition of such a worker, and helps to overcome some of the disadvantages that modern industry has brought about. We may also state, incidentally, that many a pageant has had as its main incentive certain financial interests which saw in it both a means of immediate money gain and effectual advertising for future development.

B. *Social.*—In our country there have been a number of social reasons for forwarding the festival. There is, first of all, the great wave of social awakening in which the people as a whole are coming to self-consciousness. We have, in our body politic, a most unique mingling of the races of the world. Successful as we have been in assimilating these various elements, the work is by no means completed. The festival, by making many people coworkers, not only unites the strangers of different nationalities and makes them feel the bond of brotherhood; but, more difficult than that, frequently unites groups in a community who altho of like blood and of long residence together have grown apart. We need to realize and utilize more of the rich heritage of the past which America possesses—a heritage richer and more varied than that of any other nation in the world, ancient or modern, because it represents the sum total of all their possessions.

C. *Educational.*—It is the recognition of these industrial and social compelling forces which has led educators in and out of the schools—for we

must remember that many of our greatest teachers of democracy are not in the ranks of the pedagogs—to turn with such earnestness to the new festival activities. If we consider the reasons why interest in this work has become so strong in the past few years we soon see that credit must be given to certain schools which have been pioneers in this line, in that for a decade or more they have been working steadily toward the educational utilization of festivals. Still, probably most people would attribute the present wave of festival influence to the revival of the pageants in England, which began with Mr. Louis N. Parker's Sherborne Pageant in 1905, and which led in its train during the succeeding years a score or more of gorgeous historical celebrations. Undoubtedly this movement, with its continuation in this country, has been the largest factor in calling the attention of the general public to the possibilities of great plays by the people. But other elements have contributed their share. We may mention the illuminating work done by the Ben Greet and the Coburn Woodland Players; the efforts of such organizations as the Drama League; the introduction of dramatic material in school readers; cheap acting editions of standard plays for older children, such as the newly appearing Ben Greet's *Shakespeare*; the regular attention given to dramatic work, accorded by leading educational journals, especially the *Atlantic Educational Journal* of Baltimore; and finally in the appearance of six books devoted to various phases of the subject; namely, *Festivals and Plays*[1] by Percival Chubb and his associates, *Folk Festivals* by Mary Master Needham, *The Dramatic Festival* by Anne Throop Craig, *The Children's Educational Theatre* by Alice Minnie Herts, *Pageantry in America* by Williams Chauncy Langdon, and *Pageants and Pageantry* by Bates and Orr.

As a result of these various influences, great interest has been stimulated in the production of various kinds of festivals. As is to be expected, the reasons for this interest differ greatly in depth and realization of the possibilities. Some of these may be stated, almost in the increasing order of their importance:

1. Festivals may appeal because they offer a pleasant break in the regular routine of school, industrial, or monotonous civic life. All of this is, of course, a tribute to the fact that we have not yet learned how to do our work, and, moreover, that we do not realize the possibilities that are in play. Work which contains in it no element of regeneration is not being carried on most economically; play that is nothing but recreation, nothing but a change, is neglecting a large portion of its educational and cultural possibilities.

2. The festival is looked upon, frequently, as a convenient type of entertainment. There are occasions when custom or other reasons require an entertainment of some kind; the festival is a help toward making these less of a nerve-racking process. Here again, as in the first reason, while

[1] Music teachers will be interested to know that this volume, published by Harper, contains an extensive treatment of music in the festival, including a helpful bibliography of over five hundred titles carefully classified under forty-two headings.

a valuable but incidental feature is considered, great possibilities are being neglected.

3. The festival offers an opportunity for using large numbers of people who might otherwise have no share in public life. Especially is it true in schools that in these occasional entertainments, the pupils who are dull in the regular subjects frequently shine in these special and unusual lines. One public-school teacher naïvely said to me, "I like festivals because then I can find something to do for the pupils who can't get their arithmetic and grammar." In this declaration, typical of thousands of teachers, there is only a slight recognition of what is being done, for there is scarcely any appreciation of the fact that the festival calls into being a large portion of the child which is almost neglected in most of our schools. The festival awakens the lyrical side. Only vaguely do such teachers realize the possibilities of education along lines other than the intellectual. The festival is doing much to emphasize the various approaches to the development of man and woman.

4. The festival is recognized as another manifestation of that approach in education which is so widely acclaimed of late, namely, motor activity. We are only beginning to realize that only as we do things can we claim to know them. The ultimate end of every type of instruction is not to make us know more or feel more, but to make us do more; only then is the circuit complete when impression has found its necessary consequent in motor expression. In every subject of the curriculum we are endeavoring to apply this idea. The festival is unparalleled in such opportunities.

5. The last reason with which the festival makes its appeal, is as a central core—a basis for correlation—the having of which is absolutely necessary if we are to retain in the school the vast number of subjects which claim a place. The objection is frequently made that our school curriculum is overcrowded, that there are too many subjects. But no one ever thinks of objecting to the content of the child's life before he enters school, and yet, in these years appear the rudiments, at least, of every topic which he later takes up in the schools. The great objection to the school curriculum is that it presents to the child such a multiplicity of separated and isolated subjects. In the child's pre-school life the material is not analyzed into subjects: it is all unified life. The festival gives an opportunity of reproducing these early conditions and of relating the school subjects so closely that they lose their individuality as they are merged into one great theme. Children, for instance, preparing a festival about the Crusades, make demands upon history, literature, spelling and writing, arithmetic, nature-study, music, art, manual training, dramatics, impersonation, domestic art, general management, and all the other subjects which go to make up life. So long as the various kinds of material are called upon only as they function, as they are needed, there is no sense of confusion in the mind of the child. The festival, in other words, has unified the curriculum.

III. VALUES ATTAINED

As our last division, let us consider some of the values attained and in view. We may review these briefly under four topics: (A) Amusement; (B) Social power; (C) Instruction; (D) Self-expression.

A. *Amusement.*—The festival, in its various manifestations in school, settlements, playgrounds, civic and national affairs, and home, is teaching us how to play. It is making us use our opportunities more; it is helping toward the wider use of the school plant, of the church, of the street, the playground, and the park.

B. *Social power.*—The festival is uniting institutions, bringing communities to a sense of brotherhood and showing the relation of the state to the nation, and of the nation to the world. William Chauncy Langdon, in his report on the Pageant of Thetford, speaks of the fact that this affair succeeded in uniting into one community the people of six villages, who had been separated for years. He asks this pertinent question:

> What is a pageant for but to unite a town and keep it united and moving along the road of its best welfare? The Pageant of 1911, tho past, still abides; it is there in the town, a spirit invisible but radiant, substantial and abiding, sweeping forward on its way the whole life of the town.

Every pageant and festival is a lesson in co-operation.

C. *Instruction.*—1. The new activities and unusual demands made by the festival are frequently the means of that which is the preliminary to all instruction, the awakening of activity and interest. Just as we music teachers are familiar with the employment of song in order to awaken a class, so is the festival worker aware that his powers may be employed to stir into new life a class or community which has fallen into lethargy. Not only does the festival bring spirit and zest for the immediate tasks but it opens up long avenues of work in vital discipline and drill which the student, because of the relation to this live topic, pursues long after the festival has passed away.

2. Moreover, purely formal, and in themselves uninviting, details become surprisingly necessary and hence interesting when they are related to a festival. The cost of costumes, the amount of material needed, the computing of space for various actions, the drawing of plans for the construction of the stage or peculiar types of stage property, the study of the working-out of a program or an announcement, the balancing of the certain artistic questions—these, and other topics which frequently fail to arouse the interest of the child because they have no real use, now become stimulating.

3. Festivals make concrete and definite that which before was vague and unreal. Mary Master Needham, in her discussion of the pageant at Deerfield, shows that this festival gave to well-known incidents in local history an aspect of dignity and reality for the young people of the village, which frequent droning repetition had left dull and inert in their minds.

Many a teacher of literature has been surprised and delighted when she has found what the presentation of a play by Shakespeare or a masque by Ben Jonson has done in the way of interpreting the study of literature, and especially the significance of the drama.

4. The festival can intensify many events and sentiments in a way that only the drama thruout the ages has been able to accomplish. Think for how many of us, for instance, is Memorial Day, or Fourth of July, or the birthdays of Lincoln and Washington, but another chance of escaping from the regular work, merely a day of rest; instead of being, as it is intended, of course, a time for renewing the spiritual significance of the events connected therewith. The efforts of our sane Fourth celebration are not merely to stop the noise, but by means of pageants and festivals to increase patriotic devotion. Lincoln and Washington worthily presented in dramatic form have a never-ending appeal, an ever-new significance, for even the oldest of us.

5. The festival has, as already mentioned above, accomplished much in the way of correlation, and looks forward to even more. The head worker of the South End House in Boston says that in this settlement all the activities of the summer classes during six weeks of a joyous session were directed toward the preparations for a festival. This was the motive that ran thru every type of work. Not long ago a third-grade class presented a festival of farm life, less than half an hour in length, which represented almost the entire work for the class for several weeks. As we obtain more freedom in our educational administration we shall see even greater results, for then we shall be able, not only to put substance and meaning into our utilitarian subjects, but, more important still, to show the immense value to life of those arts which at present, on account of their isolation, are stigmatized under the term "fads and frills."

D. *Self-expression.*—The festival is the largest aspect of the great movement toward self-expression in our education. In our drawing, our painting, our music, our literature, and, to some extent, our dancing, we have felt the necessity, and have been making experiments with original compositions. The festival now offers opportunities for self-expression in the drama of humanity. It has well been called the great democratic art expression. Here is an opportunity for the child, the group of children, the community as a whole, to put its life into a drama. This is true both of the actors and of the writers. One of our leading novelists and poets, working in the production of a pageant in New England, rejoiced in the opportunity which allowed him to develop one section of this drama of the people. He said, "What we writers want is the opportunity to express big situations, great democratic ideas." As a result of this opportunity, he produced one of the finest interpretations we have of the spirit which animated American pioneer life. America includes both the writers and the readers. The festival, by giving opportunities to the poet to produce,

and the people to interpret, is forwarding the best things in our life. Just as a child realizes himself in his games and plays, just as an actor learns to appreciate a character as he impersonates it, so can the community learn to understand itself and its history only as it performs this history. In order to know thoroly, we must do; in order to produce an ideal democracy, we must appreciate the past and enter thoroly into the present. Moreover, one great function of the festival is to point the way to progress in the future: to let the vision of the gifted few become the inspiration of the many. Properly used, the festival can help mightily in forwarding our civilization.

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—WINFIELD S. MCKINNEY, Englewood High School.....Chicago, Ill.
Vice-President—CHARLES HART, Business High School.....Washington, D.C.
Secretary—THOMAS L. BRECHEEN, Fremont High School.....Oakland, Cal.

FIRST SESSION—TUESDAY AFTERNOON, JULY 9, 1912

The first meeting of the Department of Business Education was called to order in the Red Room of the La Salle Hotel at 2:30 P.M. by President Winfield S. McKinney, Englewood High School, Chicago, Ill.

Registration blanks were filled out, showing an attendance of 125.

The first paper was the president's address on "A Partial Forecast of the Report of the Committee on Research, Standardization, and Correlation."

This was followed by a paper on "Efficiency in the Business Department of the High School" by John H. Beveridge, superintendent of city schools, Council Bluffs, Iowa.

The next paper was by W. B. Towsley, manager of the Sales Department, Marshall Field & Co., Chicago, Ill., on "Training in Salesmanship."

This was followed by M. E. Pearson, superintendent of city schools, Kansas City, Kans., who gave a paper on "An Education for Business."

The last paper was on "Municipal Accounting" by B. M. Rastall, director of Wisconsin State Board of Public Affairs, Madison, Wis.

Delightful music was furnished thruout the program, a victrola being generously provided by the Lyon & Healy Music Co., Chicago, Ill.

The meeting adjourned at 5:30 P.M.

SECOND SESSION, ROUND TABLE—WEDNESDAY FORENOON, JULY 10, 1912

The second session of the Department of Business Education was called to order promptly at 9:30 by President Winfield S. McKinney, with 135 persons present.

The first number on the program was a brief demonstration on the Dalton Adding Machine by Marie Sisson, a student in the Fremont High School, Oakland, Cal., showing the adaptability of the machine as a laboratory instrument for the teaching of arithmetic and its relation to accountancy in the public-school course.

This was followed by two papers upon the general subject of "Shorthand and Typewriting," the first paper being read by George A. Bohlinger, New Trier Township High School, Kenilworth, Ill., on "Efficiency in Practical Details, or Technique, of the Highest Importance." The second paper, dealing with the same general subject, was by Selby A. Moran, Ann Arbor High School, Ann Arbor, Mich., on "Specialization with Expert Instruction Requisite in Order to Meet the Needs of the Business World."

This was followed by a general discussion on a question asked by Emma M. James, Englewood High School, Chicago, Ill., as follows: "What Means are Employed in Developing Character in Shorthand Students, and How Best Can They be Inspired?" This discussion was participated in by the following: Selby A. Moran, Ann Arbor High School, Ann Arbor, Mich.; Emma M. James, Englewood High School, Chicago, Ill.;

James S. Curry, High School of Commerce, Cleveland, Ohio; Robert A. Grant, Yeatman High School, St. Louis, Mo.; Gertrude O. Hunnicutt, Bethany College, Lindsborg, Kans.; T. L. Brecheen, Fremont High School, Oakland, Cal.; and R. L. Hamilton, Rockford High School, Rockford, Ill.

This was followed by a general discussion on the subject, "Intercommunication Business Practice," which was led by Oliver D. Frederick, Tuley High School, Chicago, Ill. William A. Hadley, Lakeview High School, Chicago, Ill.; F. D. Cross, Watertown High School, Watertown, Wis.; and W. S. McKinney, Englewood High School, Chicago, Ill., also took part in this discussion.

The last number on the program was a brief explanation by T. L. Brecheen, Fremont High School, Oakland, Cal., on "How Best to Teach Touch Typewriting."

The following Committee on Nominations was then appointed by the president:

Robert A. Grant, head of Commercial Department, Yeatman High School, St. Louis, Mo.

Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash.

Sherwin Cody, 1411 Security Building, Chicago, Ill.

The following Committee on Resolutions was appointed by the president:

James S. Curry, head of Shorthand Department, High School of Commerce, Cleveland, Ohio.

Gertrude O. Hunnicutt, principal of Commercial Department, Bethany College, Lindsborg, Kans.

Selby A. Moran, Ann Arbor High School, Ann Arbor, Mich.

The meeting then adjourned.

THIRD SESSION—Thursday Afternoon, July 11, 1912

The third session of the Department of Business Education was called to order by President Winfield S. McKinney at 2:20 P.M.

The first paper was on "The Educational Value of the High-School Commercial Course" by William B. Owen, principal of Chicago Normal School, Chicago, Ill.

The second number on the program was a paper by R. H. Whitbeck, editor of the *Journal of Geography*, University of Wisconsin, Madison, Wis., on "Commercial Geography." This was followed by Ira B. Fee, superintendent of schools, Laramie, Wyo., with a paper on "Business Courses for High Schools of Smaller Cities."

The next on the program was a paper on "Accounting in Relation to Business Organization and Management" by Seymour Walton, C.P.A., dean of the Walton School of Accounting, Chicago, Ill.

This was followed by a paper on "Essentials of Practical Penmanship" by J. H. Bachtenkircher, supervisor of penmanship, public schools, Lafayette, Ind.

The last number on the program was a paper by T. L. Brecheen, Fremont High School, Oakland, Cal., on "A Practical Demonstration of the Relation of a Modern Adding Machine to Accountancy in the High-School Course," the demonstration being given by one of his students, Marie Sisson, Fremont High School, Oakland, Cal., on the Dalton Adding, Listing, and Calculating Machine.

The report of the Committee on Resolutions was next given, and on motion was unanimously adopted, as follows:

The Department of Business Education of the National Education Association hereby extends a vote of thanks to the officers and local committee whose untiring efforts are so largely responsible for the success of this meeting. A vote of thanks is also extended to the Chicago Association of Commerce and the Chicago park boards, whose courtesies have contributed so much to the interest and pleasure of our meeting.

We rejoice in the rapidly growing interest in commercial education as is evidenced by the introduction of commercial courses in practically all classes of schools. It is

gratifying to note the decreasing tendency of academic educators to look with disfavor upon commercial education. This is largely due to a more general recognition of the value of commercial education on the part of influential business men and progressive educators.

WHEREAS, At the meeting at San Francisco in 1911 a permanent committee of four members, together with the three officers of the department *ex officio*, was appointed to build up the membership of this department and collect material that would aid in standardizing the commercial courses in high schools and private business colleges,

Be it resolved, That this committee shall this year be reconstituted and increased to seven members besides the officers of the department, and the chairman shall be appointed by the president of the department.

WHEREAS, The business section of the National Education Association ought to be representative of the entire country including especially the high-school commercial teachers, and also the private-school commercial teachers, and

WHEREAS, Money is required to build up the department and enable it thru its permanent working committee to accomplish some definitely useful work for the cause of education, especially commercial education,

Therefore be it resolved, That the president appoint immediately a delegation of ten members here present to wait on the Board of Directors of the National Education Association at its final meeting of this session, and request an appropriation of five hundred dollars ($500), in accordance with the resolution filed with that board in July, 1911, at San Francisco, this money to be placed at the disposal of the permanent committee for use in building up the membership of the department and collecting material that can be used in making a report on standard commercial courses for different classes of schools, and standard methods of teaching successfully the individual subjects that such a course may comprise.

WHEREAS, The National Association of Advertising Clubs has appointed a committee to co-operate with business colleges, commercial high schools, and Y.M.C.A.'s with a view to promoting a more effective teaching of business science,

Therefore be it resolved, That the permanent committee be instructed to enter into communication with such committee of the Associated Advertising Clubs with a view to devising a practicable course in advertising and salesmanship for commercial high schools and business colleges.

The nominating committee reported as follows:

For *President*—Thomas L. Brecheen, Fremont High School, Oakland, Cal.

For *Vice-President*—C. H. Preston, Department of Commerce, University of Minnesota, Minneapolis, Minn.

For *Secretary*—W. A. Sheaffer, head of Commercial Department, West Division High School, Milwaukee, Wis.

The report of the Committee on Nominations was unanimously adopted.

The president then announced the members of the Committee of Ten to wait upon the Board of Directors and request an appropriation in accordance with the resolutions previously adopted. The following were named on the committee:

Robert A. Grant, head of Commercial Department, Yeatman High School, St. Louis, Mo.

Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash.

Sherwin Cody, 1411 Security Bldg., Chicago, Ill.

Gertrude O. Hunnicutt, principal of Commercial Department, Bethany College, Lindsborg, Kans.

Selby A. Moran, Ann Arbor High School, Ann Arbor, Mich.

Isabella Fowler, Wendell Phillips High School, Chicago, Ill.

Mary B. Shelley, Bowen High School, Chicago, Ill.

Thomas L. Brecheen, Fremont High School, Oakland, Cal.

James S. Curry, head of Shorthand Department, High School of Commerce, Cleveland, Ohio.

Winfield S. McKinney, Englewood High School, Chicago, Ill.

The meeting then adjourned.

THOMAS L. BRECHEEN, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS—A PARTIAL FORECAST OF THE REPORT OF COMMITTEE ON RESEARCH, STANDARDIZATION, AND CORRELATION

WINFIELD S. MCKINNEY, ENGLEWOOD HIGH SCHOOL, CHICAGO, ILL.

I am glad to greet you upon this auspicious occasion. You are well aware that a great economic revolution in modes of production and distribution have wrought wonderful social and industrial changes, which in turn have made necessary a new kind of education and training in our public schools, in addition to that heretofore provided by private schools or business colleges.

Like science and manual training, this new claimant has encountered strong prejudice and pronounced antagonism. But the evidences of its admission into the charmed circle of approved subjects are just cause for congratulation, and indications of its having practically passed the probationary stage.

Not content to develop power which shall expend itself merely in contemplative thought and produce only a sort of sublimated culture, free from all taint of utilitarianism, business education has for its aim the development of power which will "translate its ideas into the practical work of life." It has been said that "without a training for service, there can be no true culture." May we not, then, claim that adequate training for service will result in culture as well?

Those even who may be reluctant to admit that culture may come even incidentally from commercial or business training must concede that, without the rewards of trade and commerce, that splendid institution over there on the lake front—the Art Institute—could not exist. So of the temples of music in our midst. We have many prominent business houses whose specific undertakings are so to "commercialize" arts as to bring their refining and uplifting pleasures to the enjoyment of the masses. The chief aim of business education should be to produce the highest possible degree of efficiency and so increase the rewards in all pursuits—agricultural, industrial, trade, professional, literary, and art—that their devotees, each receiving his fair share of rewards, shall have the means and leisure to enjoy true living. Business education should not have for its purpose, as has sometimes been mistakenly supposed, the aim merely to sharpen one's wits so as to give undue advantage in life's struggle; but rather to increase production, make a just distribution, and thereby promote social justice. Its aim should be to make a self-respecting, self-supporting, and contributing member of society out of the individual who from lack of such training might be partially or wholly dependent, or else tempted to use questionable means of subsistence.

The expectation of a high order of right living can be reasonably based upon only a proper provision for right physical living. It was a recognization of this basic truth by the Nazarene when he wrought the miracle of loaves and fishes in order to satisfy physical hunger in furtherance of his spiritual teachings.

But with apologies for this digression, we come to the proposed text of this paper.

The purpose of this committee has been to make research into the past history, immediate and remote, of business education and note the aims, development, and methods prevailing at different periods; and to give special consideration to aims and methods that have been discarded and wherein and why they have failed of their purpose; also to provide for a careful analysis of the content of the several subjects, in order, if possible, to discriminate between the valuable and the valueless. Particular consideration has been directed to content and treatment that have persisted, if such there be, thru all the vicissitudes and changes of time and circumstance; also of such as have recurred from time to time, like history repeating itself—all this with a view to discovering, if possible, the vital things that make for efficiency and economy of time and effort as well as the nonessential and non-economic—things that might better be discarded. This will apply with equal propriety to subjects intended for broad general training as well as to those of a strictly technical character.

It may be assumed that the normal starting-point of a business education should not be earlier than the practical completion of a fair grammar-school course, altho Dr. Herrick, president of Girard College, Philadelphia, suggests that a half-year or a year of the grammar school might be devoted to commercial English, shorthand, and bookkeeping.

It is a proper field of investigation as to the efficiency of a strictly technical course such as is usually given in business colleges, and the combined technical and cultural course offered in the first two years of the high school as a vocational course. In order that this comparison shall be of value the efficiency of instruction in both instances should be equal. Such an investigation thoroly made by competent persons would disclose the educational value of the purely technical business subjects, and the general economic efficiency resulting therefrom. This should set the limit of specialization in the attempt to meet the business educational needs of "all the children of all the people."

Standardization does not imply a cast-iron limitation of subject or content without regard to length of time, previous preparation, maturity, or particular aims. There should rather be a system in which the content and aim, under some such classification as elementary and advanced treatment of the several subjects, shall be properly designated. There is particular need of some agreement as to suitable definitions, classifications, and terms of certain particular subjects; for example, in bookkeeping:

the two groups of accounts from which are determined the condition of the business at any particular time, and the progress, or results of the business during a given period, are variously designated by different authors as real and representative; nominal and real; financial and real; financial and speculative; financial and business; and so on thru the list; and similarly, the meaning of such terms as, capital; working capital; quick assets; wasting assets; reserve funds; sinking funds, etc.

Correlation has for its aim the determination of the relation of the various subjects and their order of sequence in a prescribed course. But here we find that a great variety of courses is needed to suit the conditions, capacities, and purposes of the various communities, schools, classes, and individuals. Here, then, is need of one, like the skilled physician, master of his *materia medica,* expert in diagnosis, who is able to correlate the proper elements in due proportion as a prescription suited to the needs of the particular case.

In accordance with the provisions of the resolutions creating this committee, its purpose was to seek an appropriation for the purpose of carrying on the work of extending membership of the department; collecting information with reference to courses of study and methods pursued in representative public and private commercial schools, or departments; and considering the various phases of the supervision of commercial work in public schools.

Upon the formation of the committee, an attempt was made to provide for an early meeting at which to discuss and decide upon working plans. Such a meeting not proving feasible for an early date, your chairman thereupon suggested that each member of the committee select one or more subjects for special investigation to report upon at a proposed meeting, an adjustment to be made in case of the duplication or omission of desirable subjects; and, in the event of any member not being able to attend such meeting, that such member should forward to the chairman copies of reports on the special subjects chosen by him. It was likewise suggested that each member of the committee confer by correspondence with one or more of his personal acquaintances relative to the particular subject upon which he undertook to report. It was also proposed that copies of reports by each member of the committee be furnished to all the other members for criticisms and suggestions which were to furnish data for the committee's report.

For consideration with reference to subjects to be reported upon, suggestion was made of the following points:

1. Scope, extent, and minimum attainment required.
2. Fundamentals and supplementary matter.
3. Logical order of presentation, systematic drill, comprehensive review, and development of initiative.
4. The presentation of underlying reasons, rather than rote, or rule-of-thumb methods.

5. The acquirement of habits of accuracy and speed in processes applicable to the several subjects.

6. Recognition of eye and ear processes of taking in knowledge.

7. Co-operation of the hand in developing the reasoning processes and fixing in the mind basic things.

8. The development of power of ready recall of the things constituting the "working capital" in educational effort.

9. Minimum requirement in courses of different lengths in the same subject.

10. Relative merits of drill and inductive development and their proper combination.

In accordance with the resolution providing therefor, a supplementary committee was appointed, consisting of a state chairman, who should designate a representative for each county, or important city of his state, to co-operate with the regular standing committee in general undertakings. This undertaking was carried out to the extent of securing over thirty such state representatives. But owing to lack of time and money necessary to carry on this campaign by following up closely and thoroly these lines of work, the results were not, as a rule, so general as was desired, altho there were several notable exceptions.

Your committee may be said to have just made a fair beginning of their assigned work. But for their consideration and guidance, there is a wealth of information and suggestion in the many able papers and discussions of former meetings of this department of the National Education Association, extending back to its organization in 1893. The report of the Committee of Nine is a most valuable contribution to the literature of business education, some of the fruits of which we are now enjoying.

It is recommended that the work of this committee be continued and that a permanent chairman be elected by this department, or appointed by the incoming president; and that the efforts of the permanent committee be especially directed toward a scientific analysis and classification of the content and methods of presentation of the several subjects properly included in any special or general commercial course for business colleges, high-school departments, or high schools of commerce; in order, as far as practicable, to prepare syllabi of varying scope and extent, such as may reasonably provide for the varying needs of more or less extended courses. This plan, it is believed, will provide the needed elasticity and adaptability to meet all special conditions.

EFFICIENCY IN THE BUSINESS DEPARTMENT OF THE HIGH SCHOOL

J. H. BEVERIDGE, SUPERINTENDENT OF CITY SCHOOLS,
COUNCIL BLUFFS, IOWA

The purpose of this paper is to suggest a method of measuring the economic, social, and ethical efficiency of the business department of the high school, by applying this method to a particular high school of the Middle West, and to several high schools located in different parts of the United

States, with the hope that some plan of testing the efficiency of the business department of high schools may be devised and applied to a sufficient number of schools to be of real value to students of education and school administrators.

A prominent educator of this country stated on one occasion that he could get a pretty clear idea of the efficiency of a school system by looking at the teachers' pay-roll; another educator declared that the number of pupils per teacher in a school system is a fair index of the efficiency of the school; a third has said that 85 per cent of the efficiency of the school is to be found in the teacher; still others are inclined to measure the efficiency of the school by the splendor of the buildings and completeness of the equipment.

We will enter into no controversy with any of these educators. Let us admit that the teacher with few pupils may render better service than the teacher with many. Let us admit that increased pay is a stimulus to better effort. Let us admit that fine buildings fully equipped furnish a favorable environment to both teacher and pupil, and stimulate the pride of the community.

What is the real measure of the efficiency of the school? The efficiency of a factory is measured by the quality of its output, the efficiency of a bank by the excellence of its credit, the greatness of a state by the quality of her citizenship. Why not measure the efficiency of the school by the quality of its graduates? "By their fruits ye shall know them." This is the fundamental principle on which we shall attempt to measure the efficiency of the business department of the high school.

In determining the economic efficiency of the business department of the high school under consideration a canvass was made of those graduating from this high school for the past five years for the purpose of determining the exact salary received per month and per year by each graduate since graduation.

In almost every case reported the graduate was employed for the full year so that, in the organization of the material thus gathered, it is only necessary to give the salary per month. In Table I below is given a brief summary showing (1) the number of male graduates reporting for each of the five years since graduation, (2) the number of female graduates, (3) the average monthly salary of males for each year, (4) the average monthly salary of females. It was impossible to get a reply from every graduate in the short space of time given for collecting these data. Some of the graduates are working as members of firms where it is impossible for them to tell just what salary they are receiving, some are housekeepers—I congratulate them—some failed to reply thru oversight. A sufficient number of replies were received to be of value. It must be observed that since we are considering only those who graduated since 1907 the number reporting for each successive year will of necessity be less.

TABLE I

SHOWING AVERAGE SALARY OF GRADUATES OF THE BUSINESS DEPARTMENT OF A HIGH SCHOOL IN THE MIDDLE WEST

	Number of Males Reporting	Number of Females Reporting	Average Monthly Salary of Males	Average Monthly Salary of Females
First year after graduation....	18	18	$48.52	$38.00
Second year after graduation...	16	16	61.35	44.62
Third year after graduation....	12	13	70.22	55.07
Fourth year after graduation...	9	7	73.33	55.00
Fifth year after graduation....	6	6	85.07	56.33

You will observe that the number of males and females reporting for each year is practically the same, thus furnishing a good basis for comparison in salary. The increase in salary of males is more uniform than that of females. After the third year there is practically no change in the average salary of females. The increase in salary for both males and females is greatest during the first three years after graduation.

Let us compare the average salary received by these female graduates and that received by those in one other line of endeavor. If a graduate of the classical course in the same high school had decided to teach in the public schools of the same city, under the most favorable circumstances possible she could not have commenced teaching until one year after graduation. Her salary for the third year after graduation could not have been more than fifty dollars per month for nine months, or $450 per year. The average pupil (female) who graduated from the business department of the high school would have received for the same year an annual salary of slightly over $660. A male graduate of the same year would have received an annual salary of slightly over $840. You may judge for yourself of the economic efficiency from the standpoint of salary. Other standards of economic efficiency will be considered later.

If the eastern college president is correct when he states that a graduate of an eastern college is worth nine dollars per week at graduation, even if the western college president is correct when he affirms that the graduate of a western college is worth fifteen dollars a week at graduation, from the standpoint of salary the showing is not unfavorable to the graduate of the business department of the high school under consideration.

Let us now consider a further economic point, the social and ethical efficiency of these same graduates.

How are we to measure such efficiency? The challenge is made: If you want to know how poorly high-school graduates write English, spell, punctuate, solve elementary problems in arithmetic, how slow and inaccurate these pupils are, ask the hard-headed business man. I accept the challenge. The hard-headed business man, the employer, is the very one who has been consulted to secure the data by which this efficiency is measured.

To secure these data letters were sent to the employers of these graduates asking them to give percentage estimates of such graduates on the following points: (1) accuracy, (2) neatness, (3) dispatch, (4) power of initiative, (5) character and standing in the community, (6) possibility of growth.

The employers were asked to be perfectly frank in their statements.

TABLE II

Male Graduates	1	2	3	4	5	6
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
A	98	100	100	95	100	Good
B	95	95	95	90	90	95
C	90	95	95	85	100	Good
D	95	98	98	95	Very good	Good
E	98	Very good	Rapid	Good	Good	Average
F	99	100	100	95	Good	Very promising
G	Good	Medium	Good	Good	Very good	Promising
H	98	98	98	No opportunity	Good	Promising
I	Good	Fair	Good	Fair	Excellent	Good
J	90	90	90	No opportunity	Excellent	Good
K	96	95	100	96	100	Very good
L	Fine	Fine	Fine	Good	Very good	Unlimited
M	95	90	95	90	95	95
N	90	100	95	85	100	90
O	90	100	85	80	100	100
P	94	95	96	96	95	Good
Average	95	97	94	91	98	95

Female Graduates	1	2	3	4	5	6
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
A	98	99	90	90	Very good	Good
B	98	100	Excellent	Excellent	Excellent	First class
C	Very good	100	95	Good	Excellent	Promising
D	95	95	90	90	Best	Promising
E	90	95	90	Average	Excellent	Average
F	98	98	Excellent	Good	Very good	Good
G	Very good	Good	Very good	Fine	Good	Promising
H	100	100	100	Excellent	Excellent	Excellent
I	98	95	98	97	99	95
Average	97	97	95	93	99	95

Reports were received concerning sixteen males and nine females. The report is significant. It is given in full. In these reports words were often used in place of percentages. They are given exactly as stated. In Table II the individual graduates are indicated by capital letters. Males are listed first; females second. Arabic numbers at the top of the table indicate the points on which the graduates were graded and correspond with those given above: (1) accuracy, (2) neatness, etc.

I leave you to judge of the efficiency based on the judgment of the hard-headed business men.

So far the investigation concerning efficiency has been confined to one school. This particular school is, perhaps, representative of many schools. Let us now endeavor to get some idea of the business departments of other schools situated in different sections of the United States in order that the conclusions may be as fairly representative as possible.

In securing data for this purpose letters were sent to a selected list of city superintendents, high-school principals, heads of departments of commerce in high schools, university presidents, and heads of departments of commerce in other universities representing different sections of the country. An attempt was made to get those people who came as closely in contact with the graduates of the commercial departments of high schools as possible, tho, at the same time, giving an opportunity for those educators to express themselves whose experience and possibly prejudice were very different.

These men were asked to give a percentage estimate of the graduates of the commercial departments of the high schools with which they came in contact on the following points, reckoning the classic graduate at 100 per cent: (1) initiative, (2) possibility of growth, (3) accuracy and dispatch, (4) definiteness, (5) ability to converse on ordinary topics, (6) character of the graduate, (7) economic efficiency.

In some cases the one who was asked to express an opinion did not care to give percentage estimates. In almost every such instance a suggestive personal letter was received in response to the inquiry. I shall quote from some of these letters later. In some cases where the writer of the letter gave percentage estimates there would be an omission on one or two of the seven points under consideration. Averages were made of all percentage estimates. The results of this summary follow: (1) initiative, 119 per cent; (2) possibility of growth, 100 per cent; (3) accuracy and dispatch, 129 per cent; (4) definiteness, 119 per cent; (5) ability to converse on ordinary topics, 94½ per cent; (6) character of the graduate, 98 per cent; (7) economic efficiency, 146 per cent. I recall one reply which had graded 20 per cent on point No. (5). I gathered from a personal letter from the person giving this low estimate that he found the cause in the home rather than in the school. He further stated that the "results obtained in the commercial departments were incomparably better in comparison to the quality of the teaching force and the quality of the students selecting a commercial course than that obtained in other departments."

I have no desire to exploit any particular department of the high school, but the composite photograph of the efficiency of the commercial department of these high schools so widely separated is, to say the least, not unfavorable.

The investigation thus far has been in line with the fundamental

principle set forth in the beginning of this address. But since all agree that the teaching force is a large factor in making the school efficient, data have been gathered relative to the teaching force from the same sources as that just given regarding comparative estimates of graduates of different departments of the high school. These same city superintendents, heads of departments, presidents, and professors were asked to rank the teachers of commercial departments as superior, good, medium, or fair on the six following points: (1) scholarship, (2) ability to interest pupils, (3) general breadth of viewpoint, (4) tact and ability in management, (5) power of social contact, (6) character. On practically every point of the six, the average ranking is between "good" and "superior." The highest ranking comes on "breadth of viewpoint," and "power of social contact." Commercial teachers seem from this report to be superior to other teachers in these two particulars.

Permit me to quote briefly from some of these personal letters. (The authors of these letters cannot be given for I have pledged confidence.) The president of one of the leading colleges of this country (all of us honor him) says:

> Certainly in economic efficiency, and ability to converse intelligently on ordinary topics, the graduate of the commercial high school and business department would surpass the graduate of the classic high school. I believe also that the graduate of the commercial department, speaking generally, would surpass the graduate of the classic course in definiteness of aim, and in accuracy and dispatch in doing work.

Again:

> Up to date I believe the commercial department has been under the disability of taking teachers who were undertrained, and with too limited an educational outlook, but in ten years there has been a most decided improvement in this particular.

Another gentleman of large experience stated in effect that the commercial department in too many schools had "second place in the estimation of the faculty" and that there are still among the faculty too many "steeped in the traditions of higher learning."

The head of the department of commerce in a large high school in the East writes that the teachers and students in his department are equal to those of any other department in the school. All of his teachers are college graduates, and many have taken graduate work. His students "can enter any college and are prepared for a business career."

From the data gathered, organized, and submitted to you this afternoon I believe fair judgment will warrant the following conclusions—subject to such revision as further, more thoro and extensive investigation may suggest:

1. That the commercial department of the high school has passed thru the stage of struggle for existence.

2. That such a department is an important factor, that it is becoming more important every year, and that it should have equal recognition with other departments of the high school.

3. That the graduates of the commercial department of the high school are reasonably efficient—economically, socially, and ethically.

4. That the teaching force in the commercial department of the high school is improving and is becoming more and more efficient year by year.

5. That the future of the commercial department of the high school has great things in store for it; that instructors in such departments should take increased courage; that school administrators are justified in giving their earnest support to such departments to the end that such schools shall train to broad usefulness in life, both cultural and vocational.

TRAINING IN SALESMANSHIP

W. B. TOWSLEY, MANAGER OF THE SALES DEPARTMENT, MARSHALL FIELD & COMPANY, CHICAGO, ILL.

The attitude in which I come before you today is not that of one who can speak as having authority along educational lines. My understanding of the request that I address this convention was that you who are the authority in this great country of ours in matters educational would be interested in what Marshall Field & Company (with whom I have the honor of being associated) are doing in the way of training their salespeople.

In the employment of help (the product of the public schools) we insist as far as practicable that all juniors be at least graduates of the grammar grade and that seniors shall have had some high-school training. These people as a rule know little of business; the atmosphere of the schoolroom is not a business atmosphere; many of the teachers have had no business training, and the daily program provides nothing that even suggests the lines of activity in which the pupil may be employed. Such a pupil cannot well decide while yet in school as to what business he will make his life-work; he comes to us merely because we can give him employment and wages; he comes perhaps because it looks easy to sell goods—salespeople always look as if they enjoyed their work, and customers never think of being cross (?). He soon finds that the life of the salesman is not all smiles and sunshine and that customers are quite human. His idea is no more incorrect than many people give expression to when they say that "good merchandise will sell itself." This is unquestionably true to a degree, and merchants employ merchandise men at high salaries who devote their entire attention to good merchandising, but when the goods are once upon the counters, the number and value of sales depend fully as much upon the salesperson—upon his knowledge of those goods, upon his general intelligence, and upon his attitude to the customer. Another common error is to assume to have solved the question of salesmanship by saying that "salespeople are born, not made"; this also may be true in a sense, but it is no more true than of any other profession. The physician, teacher, or lawyer born to the work which he has undertaken is a better physician, teacher, or lawyer if trained in the principles of his calling.

When boys and girls fill out application blanks with us they find the question, "What grade were you in when you left school?" This they frequently answer with one word—"Graduated." This necessitates our asking from what they graduated and we are told, "From grammar school." When those having educational matters in charge introduced graduating from the eighth grade, they probably knew their business, and it may be for the best. It is not within my province to discuss that question. We are inclined to be fearful, however, lest the fact of graduation at the close of the eighth grade causes many boys and girls to place that as the standard of education. They come to us, therefore, lacking in many instances that which they most need; namely, a working knowledge of arithmetic, penmanship, spelling, and grammar. In times past we found it necessary to accept these people and allow them to improve as best they could thru the process of absorption. When one had "passed" the junior stage and was ready to sell merchandise he was taught the system, the art of salesmanship, and the merchandise which he was to handle by one of his associates. Should he learn his lessons improperly, the next one coming into stock and learning it from him certainly would learn it improperly, and so on, very much as was the case with the old-time copy-book, when the child might have his first line fairly correct because of the original copy, but became less perfect with each line, inasmuch as each was copied from its predecessor. You will readily see that the tendency was to develop order-takers, not salespeople. With eight thousand people on our retail pay-roll alone, probably five thousand of whom are salespeople, this became a very serious matter with us. If salespeople were doing their best (as they saw it), if they were perfectly satisfied with that and expected us to be, how could we get them to see that there was something still better, how get them to understand that, as someone has wisely said, "Good salesmanship is by no means a small rudimentary thing which anyone can perform; it is a compound of some science and more art. The science can be taught in the form of certain rules and principles, the art can be developed thru experience, wisely supervised and interpreted." Our section managers, or buyers, were too busy to attend to such supervision and others were oftentimes incompetent or unwilling.

Another difficulty rested with the employees themselves, who resented somewhat the inference that they "needed to be sent to school." We therefore avoided very carefully the word "school" but introduced the "Study." Before any employee is allowed to sell goods he is sent to this room, where he is taught the system of the store; namely, how to make out checks under any and all circumstances, and I may say here that there are nineteen different conditions to meet. This is taught him by means of blackboard charts; in the afternoon he is given nineteen problems to solve, each problem covering a different angle in the system. If he can pass that examination he is allowed to sell goods the next day, otherwise he stays in

the Study a second day; if he is unable to pass at the close of the second day, he is paid for his two days and told to go his way, he is not sufficiently bright for our business. This is followed up by a system which keeps the Study posted as to all errors made in the house. Each person who makes an error is sent for, is shown his mistake, and is told how not to make it again.

Before the employee leaves the Study he is made to realize that the house is not arbitrarily forcing upon him information which he does not need, but rather that the management is interested in him and seeks to help him to make the most of his calling. He comes to feel that, instead of working for Marshall Field & Company at so much per week, he and Marshall Field & Company are working together in an endeavor to build up the highest type of merchandising in the world. With that thought before him, he is glad to do anything needful to develop within himself the highest type of salesmanship. Having "passed" the Study, he takes up the art and science of salesmanship in the "Conference Room." This is a school very similar to that started by the Women's Educational and Industrial Union of Boston, and was established under the guidance of a graduate of that school. Lectures are given on the manner of approach, making the sale, closing the transaction, the study of character, courtesy, and all those things that make for better selling. Illustrative sales are a conspicuous feature, and special instruction on merchandise is given both by those in charge of the room and by buyers themselves. You may be interested to know that the principal of the Conference Room today is a graduate of the room itself. I mention this merely as evidence of the fact that we appreciate the efforts of employees toward self-improvement.

Adjoining our Conference Room, and closely associated with it, is our Employees' Library. This is a branch of the Chicago Public Library and, thru a very competent librarian, our people have access to all the books of that great institution as well as to the especially fine list of books on salesmanship and merchandise already on our shelves.

Thus far I have spoken particularly of the training of adults. Plans for the care of our boys and girls along educational lines are still immature. We have for many years made it possible for any boy who wishes to join the Y.M.C.A. to receive from the Manager's Office a letter entitling him to one-half his membership fee, and as far as we can do so consistently we urge upon him the taking-up of a course in grammar, spelling, penmanship, and arithmetic. In our efforts along this line we have enjoyed the most hearty co-operation of those in charge of affairs at the Y.M.C.A.

Recently, thru the suggestion of Assistant Superintendent Roberts of the Chicago public schools and the co-operation of the Board of Education, we began sending girls to the Lucy Flower High School a number of half-days each week, at full pay, there to be given a knowledge of textiles and to be taught in some of the common branches. This was a test case in

order that we may satisfy ourselves as to whether or not this system will result in permanent good. I may say, however, that we began so late in the season that the test can hardly be looked upon as a fair one. I believe that this is one of the best ways, however, in which the schools and the merchants may co-operate, but am convinced that we, thru our educational equipment, are better prepared to give our employees a practical knowledge of merchandise which they are to handle than are the schools, whose work must be theoretical at best. My suggestion, therefore (and with this I close), is that we give the half-day arrangement a more thoro test; that it be made to apply to boys as well as to girls; that the hardware merchant, the candy merchant, and other business houses be asked to join in this plan; that the school concentrate the instruction upon the four branches mentioned; and finally that each merchant be allowed to follow this up with such special instruction as may be best suited to fit them for his own business.

AN EDUCATION FOR BUSINESS

M. E. PEARSON, SUPERINTENDENT OF CITY SCHOOLS, KANSAS CITY, KANS.

It is with a great deal of pleasure, I assure you, that I am to speak to you about an education for business. Much has been written and many have spoken about an education that fits for college. Others have spoken about the preparation for the ministry, the practice of medicine, and the practice of law. For ten years all have talked about the necessary preparation for industrial life. It is a pleasure and a privilege to stand here as the advocate of the right of a young person to be educated in the grammar schools, the high schools, the colleges, and also all manner of special schools, for a business career.

Today mankind is engaged in one of the greatest struggles the world has ever known for food, clothing, and shelter. Our people in this country have never had so many wants as they have today and have never tried so hard to supply them. The more we get the more we want. The variety and the extravagance increase all the time as we struggle on. Business arises from man's endeavor to secure for himself and for his enjoyment the necessities and the luxuries in food, clothing, and shelter. In this struggle for business there is at all times a very fierce competition. An education for business is the fitting of a young man successfully to enter this competition and secure his rightful share of the profits.

It has been said that 90 per cent enter unprepared and at some time fail because of this lack of preparation. Four years in a medical school is necessary to make a doctor, three years in a normal school turns out a common teacher, and three years more, a college president. A lazy lad dropped from the grammar grades is sometimes supposed to have a chance to succeed in business. Later on he fails and involves a number of good

men. The whole matter is passed over as an incident. The cause is not sought, there is no endeavor to fix the responsibility of the failure upon school or society. No one names the failure a stupid blunder or perhaps a crime. So many men have failed for so many years in so many kinds of business that 90 per cent of failures is expected and no doubt would be missed.

The business world must knock at the door of the schoolmaster and inquire for the educated man, the trained specialist in business. All successful men in the future must be educated men. The business man cannot remain the sole exception. The schools must go to work. The incumbent job of sending every man to his work with an education for successful business is a big one. To accomplish this our schools must have a more definite purpose. There must be a more careful selection of those permitted to enter. There must be established standards for eligibility. The rules of the game must be more clearly understood. Business values must be recognized more readily and the measuring-rod of success must be something higher and better than the dollar mark.

The advisability of maintaining schools is no longer questioned by thoughtful persons. There are those who question the manner of organization, that criticize the methods employed, that object to the course of study offered, and, so far as practical, successful business is concerned, seriously doubt the value of the results obtained. The many business and commercial schools outside of the regular schools stand as an index to the wishes of the people and the demands of the time. They stand also as a protest against the conventional course of the high schools and the colleges and also as an exponent of a new and more practical aspect in education. The unskilled, unprepared young man now entering a business career is a disappointment to himself and an unfulfilled promise of universal education. Education now and henceforth must stand for preparation as well as discipline and training in general powers. Every school and every teacher must more and more realize the definite and personal responsibility for the success of young people going out into business life. It is the business of the school to teach young people, not some traditional subject according to some time-honored theory. Teachers must teach not for themselves or the traditions of their school but for a guaranteed success of their pupils.

The patrons of our schools send their children to be educated, but more also to be educated for something. They do not expect a boy to leave school with a diploma that does not stand for some special form of preparation. This is pre-eminently the business man's age. All are looking to the business man to make the world better. Man must have his wants satisfied and his wants must also be regulated and modified. It is our business as teachers to go to work for a better business man. The people who are supporting our schools care little for our theories. They expect and demand results. We must break away from traditional and time-

honored courses of study and take seriously upon ourselves the responsibility for education specially and definitely for successful business.

Natural selection is as true in business as in nature itself. In order to have a survival in business there must be a selection of the fit and this selection must be an honest one. Too many of the unfit have had a false promise given them. The boy unfit for business should have honest, scientific vocational guidance at once. Anything short of this is a crime to the individual and a menace to the business interests of the community. Before the school can apply adequate training, great nature must supply the man. There is an old saying that hints at the fact that all fools should be farmers and by implication takes the same attitude toward business. In this day of special training, scientific application, and strenuous competition, no fools are successful farmers and no defectives or untaught persons get the business.

Burbank selects his plants, the stockman the progenitors of his future herd. The farmer gives careful consideration to the color, size, and quality of the corn for his anticipated harvest. The one who wagers his money picks the winner by the study of his history, by the use of weights and measures, and by the counting of promising points. There should be, there must be, some psychological, pedagogical, or scientific method by which and thru which a school man may have wisdom enough to give vocational guidance to a young man looking toward a business career. Dr. Fernald describes in a recent article an apparatus designed to test the will-power and physical endurance. It was to be placed under the raised heels of the patient standing on tiptoe. A trigger was fixed so that the lowering of the heels would ring a bell. It is hard work to stand a long time with raised heels. In a large number of tests, results showed that in most cases the will-power necessary did not in any way reach the limit of physical endurance. Those tested simply quit. A boy who has not the will-power to hold on even tho it hurts should not be allowed to claim the time of his school or teacher in trying to educate him for business. The "quitter" should be cured or eliminated. Too much effort has been wasted and too many persons have gone into bankruptcy because schools have vainly tried to make successful business men out of pale-faced, weak-kneed, cold-footed quitters. It is the work of those interested in education for business to at once organize tests for eligibility to business training.

The teacher in the school for business must be both teacher and business man—actual experience in both gives strength and effectiveness. The teacher must teach in the schoolroom what is required down the street in business. What is needed down the street unfortunately is not often known to the school. There must be a more systematic, scientific study of the necessary personal equipment for the successful, positive, aggressive, polite, amiable, gracious, well-mannered, well-poised business man. Many

schools have for the teaching of physiology and anatomy a manikin showing all parts of the human body. There should be for the use of the business teacher a kind of business manikin showing all the parts of a business equipment for the ideal business man.

It is certainly incumbent upon any school, special business or otherwise, to put into this business anatomy all the bone and the sinew, the muscle and the tissue, the blood and the brains, the mental acuteness and the moral uprightness, necessary to present to the world a stalwart worthy to enter business or commercial life. Every school must sooner or later recognize in its attitude, in its course of study, and in its teaching, that a large number of its boys and girls are to enter business pursuits and that it rests with the school whether they enter prepared or unprepared. The business course that does not contemplate a thoro study of a code of business ethics certainly dwells only on the letter of the law and impoverishes the student by omitting the spirit thru which there is the only promise of an aroused and quickened business conscience.

"Put money in thy purse" was good advice and is still worth every cent of its face value. To be successful in business, money must be accumulated, for nothing makes money like money and nothing gives more confidence than money in the treasury. The oft-quoted words, "Who steals my purse steals trash," show how little the dollar mark represents in contrast with a man's ethical business standards as they relate to honor, reputation, fairness, regard for the rights of others, square-dealing, duty toward home and country, and the proper relation of man to his fellow-men and to his Maker. The ethics of law will not allow "snitching"; of medicine, advertising; of the ministry, heterodoxy; of the sportsman, poaching. Nor will the ethics of the game of business allow a man to "shinny on the wrong side." Misrepresentation in business is the greatest crime and likewise the greatest temptation. It is a big job to impress this fact in regard to misrepresentation in business. Nevertheless, all of our schools in any way interested in the business man should strenuously endeavor to turn out pupils who know the value of honesty in business most thoroly, believe in it most sincerely, and are prepared to practice it most religiously. The psychologist, the teacher, and the business man must unite in a study and an endeavor to arrive at some kind of ethical standard to measure the right and wrong of the rules for business.

It is very difficult accurately to set forth actual business values. The facts are complex and variable. We have no standardized units of measurement in business education. It is as difficult as the fixing of units for entrance requirements of colleges. The best and the wisest in the teaching profession have worked on this for fifty years. The best expression to date is that "fifteen units are required, of which the following may be offered." Peace and harmony vanish in the argument that follows on what shall be offered. However, the study and the continuous discussion of entrance

requirements has been of great profit, as the measuring-units now in use have a definite meaning in the minds of all. They are the best measuring-rods that we have of the required ability and power to do college work.

In this discussion I propose fifteen credit units which our schools shall develop for the entrance requirements to business and offer the following, having the value of one credit each:

1. Thoroness in the fundamentals of the conventional course of study in our public schools.
2. Ability to work hard, to remain at a task until its completion.
3. General information of the world, its people, and their struggle for food, clothing, and shelter.
4. Familiarity with the forms and details of some kind of specialized business.
5. Skill and tact in management and direction.
6. A knowledge of local customs and special laws.
7. Power to change environment and to establish new conditions.
8. Power to decide quickly and to act promptly.
9. Willingness to co-operate.
10. Ability to appropriate, power to initiate and originate.
11. Well-developed, thoroly trained, morally clean physical manhood.
12. Fixed habits of conduct, courtesy, and manners.
13. Personal appearance, dress, and carriage.
14. Proper attitude toward ethical concepts.
15. Good plain gumption, whatever that means, and including all that it implies.

We may well ask ourselves the question, What shall be the measure of success; first, for the school in the training for business; second, for the man in active business; third, for the one ripened and matured in experience, advanced in years, and retired from business? Success cannot be measured in money values. To accumulate money may require only craftiness; to spend money requires wisdom. To direct the influence of money makes a heavy demand on true manhood. To give largely is to have brotherly love and patriotic devotion. To live, not without money but above it, is to be the highest type of a true business man.

The experts crowded round an object of interest. They were grading the points of a splendid animal to be sent to the cattle herds of some great western pasture. It was commencement day. Friends were gathered around the young man graduating from school. An expert teacher was grading his preparation for business. The success of the teaching in the school was measured by the height of the score. It was a crowded market place. A busy man was in the thick of the struggle. The measure of his business success, as the score was read by all his competitors, was the life he was leading, the amount of his enjoyment, and the good he was able to do. It is an old man alone in his comfortable library. It is the measure of his success, as recorded in the history of an active, happy, successful life, that he is at peace with himself and his fellow-men, that memory brings no unpleasant recollections, and that he is cheered and sustained by an unfaltering confidence in the good that men can do.

THE EDUCATIONAL VALUE OF THE HIGH-SCHOOL COMMERCIAL COURSE

WILLIAM B. OWEN, PRINCIPAL OF THE CHICAGO NORMAL SCHOOL, CHICAGO, ILL.

The subject of this paper was chosen with reference to a definite situation in the American high school. It is the purpose to present the elements of that situation with the view of reaching a clearer understanding of its significance. If the analysis given proves to be approximately correct, it should indicate what attitude the organizers of school systems and the teachers of commercial subjects should take toward the work. The immediate practical reason for discussion of the topic of the paper is the fact that the educational value of the business course in our high schools is questioned by some and overlooked by others. We need as a part of our educational theory a rational and consistent doctrine to support our use of money, men, and material in imparting the knowledge and technique of the commercial arts in a school whose confessed aim is to make men and women, rather than clerks, stenographers, and bookkeepers. If thru our business course we produce the former but not the latter, we ought to know it. If we produce both, we ought likewise to know it, and because of this knowledge take courage and renew our efforts. If we cannot by any means produce the one by the process by which we produce the other, we ought first to do the greater task and later turn our hand to the lesser.

Like every other part of our educational system, the business or commercial course has its history, and that history explains, in part at least, the accepted valuation of the course. The practical arts have always had difficulty in gaining admission into the curriculum since Aristotle pronounced against them. The conception of education embodied in the seven liberal arts of the mediaeval schools was the product of the fourth century B.C. and has persisted to our own day. It is a conception that at bottom no one has reason to object to. But it is a conception that demands progressive restatement and interpretation in the light of changing social conditions. Above all, that conception must not be identified with a given content, curriculum, subject-matter, or whatever you please to call it, nor again with a method or procedure associated with the use of that content. All true education must be liberalizing and humanizing. The history of secondary education among the peoples with whose culture our own is one presents these constant features. On the one hand, there is a curriculum already in the field hallowed by an age-long tradition, institutionalized in schoolmaster, schoolbook, and school practice, prescribed by the learned professions, serving as a mark of social distinction, and withal meeting in a large and true way the needs and aspirations of those whose lot in life permits them to move steadily and leisurely thru its length. On the other hand, there is the accretion of new subjects, the product of

a complex and developing social life, created to meet immediate practical needs and ending as accepted practical arts and sciences. These new arts and sciences are the indispensable tools for meeting pressing and insistent practical demands. The young man or woman who would earn a living must be able to use them. There is no school or similar institution to give him the requisite knowledge and training. The demand is met, so far as it is met, at first by private teachers and private schools. The teachers are without special training for their tasks as educators. They possess a certain knowledge of technique. They are ready to impart it as best they may. They make no other pretensions or claims. Their work, if honestly performed, like any other service is paid for in accordance with terms agreed upon at the start. It is a simple commercial transaction from beginning to end. In this way, the practical arts of writing and arithmetic were taught at the period of revival of commerce in Europe. For a time these private teachers and private schools were ignored. Gradually they came to be looked upon as rivals of the established institutions and were forbidden to teach by church and state acting together. Finally for self-protection and in deference to increasing public demand, the existing schools took over the task of giving instruction in these subjects, which now occupy an unquestioned place in the curriculum.

This process of incorporation of new subjects into the curriculum finds an illustration in the case of the sciences. The struggle was more protracted and more difficult because the traditional curriculum of the secondary school and college was more firmly intrenched. Nevertheless, the nature of the contest was the same. On the one hand, there was a curriculum which utilized the full time of the pupils, a method of instruction reasonably fitted to the studies pursued, a body of teachers, themselves the product of the curriculum which they believed in, an educational theory which fortified them in their resistance to change. On the other hand, there was a rapidly increasing body of new knowledge pointing to a new world-industry, a new medicine, a new society, a new cosmology—in short, a new world. The sharp and fierce contest ended in the final admission of the sciences into the curriculum.

It is a similar situation in our schools that prompted the choice of the subject of this paper. On the one hand, we have a time-honored curriculum, administered by a set of trained teachers, adapted to achieve certain results, fortified by social forces, and buttressed by the weight of institutional authority, a curriculum which utilizes the time and energy of those that pursue it. On the other hand, there is the insistent demand of the commercial world for better-trained workers, and the necessity that the boys and girls should make a living. The question then is, Can we meet this immediate practical demand upon our educational system and at the same time justify our course from a broadly human and educational standpoint? The answer to the question has two aspects, a theoretical and a practical

one. In the first place, we must if possible get a basis for the valuation of the new studies, and in the second place, we must see to it that our practice leads to the realization of these values in the lives of the boys and girls who take the business course in our schools.

What then is the educational value of the high-school commercial course? The answer will depend upon the standard of value which we apply to it. The test of educational value is twofold—individual and social. This twofold test must be applied as one; that is, to neglect either aspect or phase of it is to run the risk of invalidating the results obtained in the use of the other.

On the individual side, we ask of a given subject-matter, activity, or aim if the growth and development of the pupil demands or is stimulated by the use of the new material. Contribution to and regulation of growth is the criterion, then, on the individual side. It has been the great fundamental achievement of the last century and a half to have secured the recognition of this criterion. All the battles of all the educational reformers, from Rousseau on, have been waged to secure the freedom and opportunity to apply it in the organization and conduct of schools. Applied to the subject-matter of the curriculum, it has led to the rejection of material unfitted to the age and powers of the children, to the creation of a genuine children's literature, to graded textbooks, to the expansion of the curriculum of the elementary school with its meager content of the school arts of reading, writing, and arithmetic, into the present course of study with its enrichment of history, geography, nature-study, the industrial arts, and the like. Applied in determining the activities of children in the school, it has led to the introduction of the plays and games of the modern school with their incalculable increment of educational gain. Applied to the discipline of the school, it abolished corporal punishment, created a new sympathy for children, established the principle that the moral growth of a pupil is the chief concern of the teacher and the school, and that self-respect is the organizing nucleus of personality, to foster which all other aims of the school should at critical times be sacrificed. Applied to the school as an institution, it has brought us to recognize that individual growth is possible only within a wholesome and stimulating social medium, where standards of personal behavior and ideals of personal achievement find realization in the habits, intercourse, and activities of teachers and pupils; it has within late years forced us to see that schoolrooms and schoolhouses must be lighted and ventilated so that the growing children who are forced to occupy them may not be hindered but helped in their physical development. Now this individual criterion has been applied more consistently and thoroly in the lower grades of the elementary school than in the higher, and again in the higher grades of the elementary school than in the high school. Some signs there are that we are just on the eve of a period of positive constructive effort to give us a high school whose curri-

culum, organization, and administration will make the principle of growth fundamental.

On the social side of our test of educational value, we ask of a given subject-matter, activity, or aim if the growing individual will at maturity find thru these an abundant entrance into the social world which is to be his world. Social utility, then, is the criterion on the social side. This has in reality been the criterion applied in the upbuilding of all our school curricula. The difficulty has been, however, that while it served to secure the introduction of subject-matter into the curriculum, when the curriculum was once established this criterion was lost sight of and the material came to be looked upon as being educative *per se*, instead of being educative in a definite social situation. Herein lies the cause of the ever-recurring conflict between the old and the new in school curriculum, school organization, and school administration. This criterion, applied to existing social conditions and the school, led to the formation of the curriculum that had its origin in Greece and Rome, and which remained the curriculum of Europe and America until modern times. The classical curriculum in origin and intent was practical, designed to fit its students for the successful conduct of their lives in the station or profession which their economic and social status warranted them in aspiring to. The limits of this paper will not permit the attempt to set forth how this much-abused curriculum as once conducted was truly educative on the individual side. It is sufficient to recognize that it no longer meets the demand of social utility.

No one of you is likely to interpret the meaning of social utility as equivalent to the satisfaction of immediate and changing wants. No such limitation is to be placed on the scope of the word. But it is absolutely necessary to recognize an order and scale of importance, if we are to apply the criterion with definiteness and prospect of success. The first and fundamental question, then, to ask of a course of study on this social side is whether it enables a child to make a living. There is a vast deal of half-truth talked by educators and others on this score. One hears that studies or curricula should be pursued just because they have no practical value. Yes, but the question is by whom? By all, or by some? If by all, why spend our time discussing a kind of education that is beyond the reach of vast numbers of our children? Let us not stultify ourselves. If by some, are they not those whose fundamental needs of food and shelter and clothing are supplied already? Every child begins his education in a definite economic situation which with iron rigidity conditions his health, his happiness, his ambitions, his prospects. This situation he may work out of, but he can do so only by working with it. Lay it down, then, as the first article in our educational creed that our course of study should fit every child into his economic world. It is a narrow if not contemptible view of our economic life to see in it only a highly organized means of gratifying our more elemental desires. Not only are our sky-scrapers, our railways, our automo-

biles, and great cities, with their luxury and vice, the characteristic product of this life, but our universities, our schools, our art museums, our government, our culture, rest and depend on its solid substructure. To introduce every boy and girl of this land into our economic life is the basal demand made upon our school.

Again, we should ask of every course of study on its social side whether it introduces the pupil to social service. Perhaps this will be taken to indicate some distinctly different line of social utility than that of earning a living, but it need not be so taken. There is a social life that is over and above, rather than contradictory to, our economic life. The sordid and unlovely character which finds its total interest and activity inside the economic process is to be taken as a case of arrested development. The narrow-minded business man is not so much on the wrong way, but he has not gone far enough. Our course of study, if it is to be educative, must open the way to social service for every boy and girl, not necessarily by taking them out of the life of commerce and industry, but by leading them to realize how that life is a life of social value and meaning. Nay, it should make them feel that their life in business and industry opens up to them the very means and the way into social service.

Again, and briefly, the criterion of social utility would prescribe that the curriculum and the school provide the possibility of social expansion. Perhaps this is the finest thing that education can do for a boy. It must enable him to earn a living in a definite place, in a definite way, by definite putting-forth of effort. It should also make it possible for him to escape the limits of time and space, and, by the use of other men's work recorded in books, find joy and encouragement, ideals and purposes, information and taste, by which he may realize his higher self.

Perhaps the conclusion of the paper is already in your minds. I could not come before you as an expert in your field, which is not mine. My experience with schools of the old sort and the new has made me bold to address you. I thought that I might at least set forth what views I have come to hold of the work to which you are devoted. In so doing my purpose was not so much to point out new paths as to disclose old values. Applying my twofold criterion, then, I should like to mention one or two great advantages that you have as teachers of the commercial branches.

In the first place, the high-school commercial course has the advantage of *immediacy*. The pupil who because of home needs or personal inclination is eager to turn his thought and his hand to something that promises financial return is able to see the connection between his school work and the world which he is soon to enter. He is not dealing with a system of postponed values. He can test the practicability of the classroom work by comparison with the business world about him. Finding himself in a situation essentially like that in which he expects to labor, he senses the reality of the demands made upon him, learns to measure his own capacity and

liking for the work he does, and, stimulated by the prospect of definite achievement, he puts his best efforts into his work. It is just this real educational opportunity that comes to the teacher of the commercial subjects, an opportunity which the teacher of more abstract or less practical subjects often seeks for in vain.

Again, the high-school commercial course takes account of *individuality*. It attempts, at least, to meet the pupil as he is. Its demands upon him are not the unusual requirements of the learned or academic world. It asks of him definite and skillful performance of outward, tangible acts. He is equipped for the performance of the duties imposed upon him. He can work therefore with the assurance of a reasonable success. From day to day, he can measure his progress by comparison with his own past performance. It is his skill, his industry, his attention that read themselves into the record of his achievement. If he is slow in one part of his work, he may be unusually rapid in another. All the time there is presented for his study the objective evidence of his defects and his excellences. All the time, therefore, he is wrestling directly and concretely with the problem of self-improvement. Thus the motive of self-improvement is made effective thru a course of study that affords concrete self-revelation. The reality of this situation carries with it the maximum of educational opportunity on the individual side.

Finally, the high-school commercial course takes account of an *actual social world*. To be sure, it does not open up a comprehensive view of that world. But it does afford an entrance into one important phase of social life, the one that perhaps is most attractive and most insistent from the pupil's standpoint. Moreover, it is a part of that world that can be brought into the schoolroom with the least departure from reality. The methods and processes of the world of commerce become the methods and processes of the schoolroom. Whatever meaning they can have for the pupil later, they can easily be made to bear for him now. The standards of promptness, accuracy, definiteness, and responsibility of the business world are not interpreted as exactions of the artificial world of the schoolroom, but as a challenge of one's fitness to enter into the real order of things. It can always be said to him that this is the way the world does its business. If the instruction is what it can and should be, there need be little danger of making the work of the pupil a mere mastery of routine. It is the high duty and the rare opportunity of the teacher to make the course educative. He has the great advantage of beginning with the pupil where he is, of dealing with him as he is, and of introducing him to a world that is.

COMMERCIAL GEOGRAPHY

R. H. WHITBECK, EDITOR OF THE "JOURNAL OF GEOGRAPHY," UNIVERSITY OF WISCONSIN, MADISON, WIS.

Of late commercial geography has been attracting more attention than ever before. An author who has written a successful textbook in commercial geography, and also one in physical geography, recently said that the sales of his physical geography were declining, but the sales of his commercial geography were increasing at about the same rate. In the state of Wisconsin, the reports show that there is a gradual increase in the number of schools which teach commercial geography, and several book men have given it as their observation that there is a steadily growing interest in the subject the country over.

There is a general belief among school men that some phase of geography ought to be taught in the secondary schools. Pupils do not retain a very large proportion of the geographical knowledge which they acquire in the grammar grades. If they go from the high school into the active affairs of life or enter higher institutions, they find themselves handicapped by the lack of general knowledge in the field of geography. In the last few years several universities have reported the results of examinations which they have given to their classes, examinations covering only the elementary phases of geography. Without exception these examinations have revealed an unbelievable ignorance of geography among college students. Similar reports come almost invariably from the normal schools. The history teachers in normal schools and universities complain because their students know so little about geography. There is no escaping the fact that unless geography is taught somewhere in the secondary-school course, the pupils who go out from these schools are going to be inexcusably ignorant in a branch of study which an education is supposed to include, and is duty bound to include. Perhaps an educated person may be excused for not knowing how to compute interest on a note, or how to find the number of yards of carpet necessary to carpet a floor. Perhaps he may be excused for not knowing the elementary facts of the history of his own country. Perhaps he may be excused for ignorance of spelling and English generally. If so, then he may be excused for ignorance of the common matters of geography. But until we are willing to excuse the schools for turning out pupils ignorant of English, of history, and of elementary mathematics, we shall not be willing to excuse them for turning out pupils who are ignorant of the common matters of geography.

So insistent have been the demands of the advocates of new branches of study that the grammar-school and high-school curricula have become more than crowded. There is no place for a study in either of these schools unless it can justify itself by its fruits; and unless geography can show that it gives training and knowledge worth the time spent, then geography

has no claim to a place in the schools. But no person is willing to advance such a contention. As an instrument of training and as a study yielding a kind of knowledge which even moderately educated people desire and constantly make use of, geography scarcely needs defense. The question before the secondary schools is not whether they ought to teach geography at all, but what phase of geography they shall emphasize. In some schools the question may be, "Can we afford to teach commercial geography in addition to physical?" for there is a widespread belief that physical geography is the best of the physical sciences for the first year of the high school.

More and more, of late, commercial courses are being introduced into the secondary schools, and where a commercial course as such is not offered, a considerable number of commercial studies may usually be found; among these is commercial geography. The reports of the United States commissioner of education give no data regarding the number of high-school pupils who study commercial geography. If such figures were available, we should find that the study, altho growing in favor, is, as yet, taught in a minority of high schools.

I purpose to ask and answer three main questions:

First, what claim has commercial geography to a place in a secondary-school curriculum?

Second, why has it not been held in more general favor?

Third, how can it be made a more satisfactory, a more efficient educational instrument?

The demand for commercial geography is a logical outcome of the growth of commercial courses. Why is there a growth in commercial courses? Doubtless because the age is dominated by commercial ideals; just as we had in the past an age of faith, an age of feudalism, an age of chivalry, so we have now an age of business. The best ability and best blood of our period is being, to a noteworthy extent, attracted into the field of business. The dominant nations are seeking in every possible way to extend their commercial domains—to expand commercially. The gravest of our national problems are in the field of industry and commerce. A very considerable proportion of our school graduates are looking forward to business careers. Our people are extensive readers of newspapers, magazines, and books. All of these facts tend to draw the attention of people toward matters of commerce and of industry and to make them desire to know about the commercial affairs of the great nations of the earth, about their resources, their relative strength, and other similar matters. So long as commercial interests dominate our people, so long will there be a demand for studies which make people intelligent about commercial activities. This is the reason why commercial geography is growing in favor.

It must be said, however, that educators generally, including geog-

raphers themselves, have not looked with high favor upon commercial geography. Somewhat reluctantly do geographers recommend it. The reasons are easily discovered. Commercial geography includes so many statistical matters, that, in the hands of the untrained teacher, the study is ever in danger of degenerating into a memorizing by pupils of many disconnected and disassociated facts. The subject-matter of commercial geography lends itself more readily to mere memorizing than does physical geography; unless carefully safeguarded, the study may become scarcely more than a momentary committing to memory of many facts, without much thought of their underlying causes, or of their interrelations.

A study which is entitled to a place in our schools must do for the pupil two things, at least. It must train him in good mental habits and it must give him a body of knowledge which in some useful way functions in the affairs of life. There is no denying that the subject-matter of commercial geography, wisely selected, is worth teaching and worth knowing. The question is: Can the study be so taught that it shall require pupils constantly to use other faculties than the memory? Can it be so handled that pupils will observe, reason, compare, judge, and perform other mental tasks which they need to perform if they are to secure a well-rounded mental development? Because commercial geography is not generally so taught that it does accomplish these ends, educators have looked askance at it.

The questions before those of us who believe the study can be made a valuable and efficient educational instrument are: What shall we do to make it such an instrument of education? How can the tendency to memorize without thinking be overcome? How can the study be rationalized?

At the outset, we must recognize that the main aim is not to learn a multitude of ever-changing facts about exports, imports, manufactures, and the like. It does not matter much whether France is the third or the fourth country in the production of wheat, or whether or not Java exceeds Cuba in the production of cane sugar. It does not matter much whether Lille makes more laces than Berne, or less. It does not matter much whether Japan produces more rice than India, or less. Such knowledge is of comparatively little use, for a *Statistical Abstract*, or a *Statesman's Yearbook*, or a textbook can supply this information when wanted. It does not pay, as a rule, to burden the memory with very much of such information.

Herein lies one of the faults of commercial geography: it tempts the teacher to lay emphasis upon such questions as, What city of France produces the most lace? or, What city of England manufactures the greatest number of pocketknives? or, Where in Ireland is the most linen made? I do not intimate that such questions must be excluded. A certain number of such questions have a legitimate place. The criticism is that such questions are likely to occupy too prominent a place in the study of com-

mercial geography. There are other fields of inquiry which yield more valuable returns.

To me it seems that the real purpose in the study of commercial geography is to get an intelligent understanding of the basal reasons which make one country a great producer of certain commodities or a great exporter, importer, or carrier. These reasons may be climatic, or historical, or racial, or otherwise; and this leads me to the point which I think is sometimes overlooked—that commercial geography is interwoven closely with elementary economics, with the facts of political geography, with facts of history, as well as with facts of climate, physiography, and geographical situation. A pupil well trained in commercial geography is the one who understands, for example, not only that Great Britain produces and supplies cotton goods in great quantities to the world, but *why* the people of Great Britain have devoted themselves to this line of industry. It is the pupil who understands that, on one hand, the resources, climate, coastline, soil, and other geographical factors are important in directing a nation's activities, and, on the other, that racial traits and inheritances, stage of civilization, and character of government, also, are factors of consequence.

A commercial nation is not made simply by the possession of great resources, or a favorable geographical position, unless the people who occupy this land have the abilities and the energy to develop and utilize what nature has provided them. Doubtless the growth of Great Britain, Germany, and the United States as commercial nations has a close and immediate relation to the resources of coal and iron which these nations possess: but it is also true that Spain, Cuba, and Brazil have vast resources of iron, and China of coal; and yet these countries are not industrial countries. There is something in the people and institutions of the latter countries which unfits them for the utilization of their resources, and on the other hand, there is something in the character of the German, the Englishman, or the American which leads him to discover, to develop, to utilize the resources and forces of nature about him.

The effective teaching of commercial geography requires that the teacher himself appreciate in some degree the various factors which are potent in the commercial life of a people. Frequently the best way to get at the underlying causes which make for or against commercial development is to select two countries which are commercial rivals and then compare and contrast them. The comparison of France and Germany with regard to climate, resources of soil and minerals, favorableness of geographical position, character of coastline, racial traits, education, and government, will help to impress the reasons why one of these countries surpasses the other in industry and commerce. A comparative study of Brazil and Argentina, of Canada and Mexico, of Norway and Sweden, of China and Japan, of Australia and South Africa, is a useful exercise. The aim is so to attack the subject that pupils must think, must exercise judg-

ment, must make comparisons, must balance an advantage or disadvantage in one country over against a corresponding advantage or disadvantage in the other country. As a method of stimulating pupils to make this comparison in my own classes, debates are held in which three or four persons on a side present arguments for and against such a resolution as this: "*Resolved*, That France possesses natural advantages for international commerce equal to those of Germany." These debates never fail to create interest, and to lead the more thoughtful pupils to a fuller appreciation of all the factors which make for commercial growth.

Another device has been borrowed from the agricultural college. One of the activities in which students of agriculture engage is the judging of farm animals, the judging of the quality of butter, of cheese, or of seed corn. Sometimes it is conducted in this way. A perfect dairy cow, for example, is assumed to deserve a score of 1,000. Then each of the different important qualities which make up the perfect animal is weighed. The cow which is to be judged is inspected by the student, and each of the different points enumerated on his score card is considered with respect to that animal, and a numerical value is given to each point, and finally the sum of all these points is obtained. This sum constitutes the score given to that animal, say 800 or 825 out of a possible 1,000. In a similar way our students in commercial geography are asked to score or judge various commercial nations. Possibly our scheme of weighing the different points is not so good as might be devised, for it is still in the experimental stage. We conduct the exercise as follows: The ideal commercial nation is arbitrarily given 1,000 points. It is not assumed that an ideal commercial nation actually exists. We have, however, generally given our own country about the highest score received by any nation, altho it is not given the full 1,000 points. These thousand points are divided thus:

1. Climate in all its bearings combined with area receives 350 points.
2. Natural resources, 300 points.
3. Natural advantages for carrying on international commerce, including physiography, boundaries, coastline, situation with regard to other commercial nations, receive 150 points.
4. The people and the intelligence with which they utilize their advantages and resources, receive 200 points.

A country, Germany, for example, which has been previously studied, is taken up and members of the class are called upon to work out a score for Germany. The climate of Germany in all its bearings is considered. Germany is compared with a country otherwise like it, but having an ideal climate, that is, ideal in every particular. The ideal country would receive 350 points; Germany is given such a part of that number as the student believes it to be entitled to. That is, he thinks over the various elements in the climate of Germany, both favorable and unfavorable, and judges how nearly Germany approaches the ideal in this particular. Then the same is done with reference to area and natural resources, and Germany

is compared with the ideal country in these particulars; the ideal country of course must have a very large proportion of its area made up of productive soil, yet it must have some mountains, for metallic minerals are seldom found extensively except in mountainous regions. Forests are considered, fisheries, water-power, and natural waterways. When the pupil has formed his mental concept of the ideal country, he compares Germany with it and gives Germany such a proportion of the 300 points as he thinks it deserves. In the same way the other two points are handled, and the total score is computed. The students are then asked to defend the score which they have given to the country on each of these points.

By such exercises it is hoped that the pupils may be compelled to digest the information which they have gathered, to judge, to compare, and to exercise reason. I am able to testify that the device works well. The device is used only now and then; and it occupies only a small fraction of the time devoted to commercial geography. It forms a review or summarizing exercise rather than the initial study of any country.

The rationalizing of commercial geography may be further accomplished by emphasizing such questions as the following:

1. In your judgment, has Canada or Argentina the more promising future as an industrial and commercial nation? Give the reasons for your answer.

2. Forecast the future development of Australia. Along what lines is that development most likely to take place? Give your reasons.

3. Compare the resources of Brazil with those of Argentina; also compare the ability and efficiency with which the people of these two countries are developing their resources. How do you account for the difference?

4. Contrast the commercial activities of Japan and China in the last half-century. How do you account for the difference?

5. Compare the tariff policy of Germany with that of Great Britain. To what extent do you think each country is wise in the policy which it has adopted, and why?

6. What are your best arguments for or against reciprocity between Canada and the United States?

7. Why are coal deposits more valuable to a country than gold deposits?

Such questions imply some maturity of thinking and possibly some of these are too difficult for consideration in elementary classes. They will, however, suggest lines of inquiry which may be used in modified form in any class. The purpose is ever to get pupils to think, to use the information which they have acquired, and thus to make their knowledge dynamic rather than merely static. Questions which ask "how much" or "how many" are likely to be overemphasized in commercial geography; while questions which ask "why" are likely to be neglected because they are more difficult and because they do not admit of definite answers. Lest I be misunderstood, permit me to repeat that it is not advisable to omit the ordinary type of questions, such as, "What countries are the leading producers of wheat or of gold?" or, "What is the character of the export trade of Great Britain, and of the import trade?" or, "Where does the world get its supply of rubber, or cane sugar, or cacao, or cork?" All of

these questions are legitimate, providing they do not constitute an undue proportion of the whole, and providing those questions which demand thinking rather than memorizing are freely introduced into the class work.

Besides these fundamental considerations, there are certain incidental matters which I desire to present without elaborating. Commercial geography offers the teacher an opportunity to give pupils certain incidental forms of instruction and training which will prove exceedingly valuable in after-years. Dealing as the study does with many statistics, it is desirable that pupils learn some method of presenting them which shall impress the story that they contain. More and more, men are employing curves and diagrams, by means of which statistical matters are presented graphically. Graphics appeal at once to the eye; they make an impression which is likely to remain, and by means of them one may present many facts in small space. I strongly recommend that you give your pupils frequent opportunity to represent significant statistical matters by curves and by other forms of diagrams. Such work appeals to students and, having once learned the practical value of graphic representation, they have at their disposal a most effective method of presenting statistical facts.

Government reports and publications freely employ these graphic methods. Magazines and textbooks are using them. Scientific men are employing curves to present graphically the ideas which the mind could scarcely grasp in any other way. The use of outline maps or base maps upon which pupils plot facts involving both quantities and distribution is a profitable exercise; such, for example, as the distribution of the coal areas of the United States, or by circles of different sizes representing the relative production of wheat or corn or cotton in the different states, as Brigham has done in his *Commerical Geography*.

While the textbook will supply the larger part of the subject-matter, your pupils should learn during the course how to find and where to find additional information pertaining to industry and commerce. They ought to become familiar with the most useful of our government publications, to learn how to get them and how to use them. Your reference shelf should contain both the regular and special publications of the Census Bureau, not simply the reports of the decennial census but the serial reports which are being issued nearly every month and which often contain the newest information about some industry. Pupils should know of the existence of the *Statistical Abstract;* of the publications of the Bureau of Manufactures; of the various bureaus of the Department of Agriculture; of the Department of Commerce and Labor; of the Commissioner of Corporations; of the Geological Survey; of the Reclamation Service, and others of the government departments from which bulletins are issued periodically. Unless one has systematically sought to get from the government its wealth of publications in these lines, he does not realize what a storehouse of

material is at his command simply for the asking. It may take some correspondence and time to acquaint oneself with what is available, but it is time and money well spent. Pupils who use these publications derive as much advantage from learning of their existence as from the actual information gained at the time.

The teaching of commercial geography should also form in the pupils the habit of using the encyclopædia and atlas. Maps should be used freely and systematically. Locational geography should not be neglected. All of these things cannot be done by one teacher. Each teacher will decide which of these incidental activities he will emphasize. It cannot be doubted that a pupil will get more from commercial geography thru such methods as these than by the more intensive study of a textbook, even tho the latter method might better fit him to pass examinations.

I wish also to recommend that you interest your pupils in doing a certain amount of voluntary outside reading of a semi-popular character. *The World's Work*, for example, publishes excellent articles which pupils in commercial geography will enjoy and profit by. Many supplementary books exist; such as the series entitled *Great American Industries*, published by Flannagan, of Chicago, or a more scholarly series on *The Story of Sugar*, *The Story of Oil*, *The Story of Gold*, and others, published by Appleton, or books like McMurry's *Larger Types of American Geography*, published by Macmillan, or Brigham's little book *From Trail to Railway thru the Appalachians*, published by Ginn. These are only a few of the interesting books which almost anyone would enjoy reading.

These latter recommendations I have called incidental matters, and yet if sanely handled they may prove to be of as great benefit to your pupils as the more serious work of the class. All of us know from our college experience that those courses which taught us where to find material, how to find it, and how to use it were on the whole more valuable than the courses which at the time gave us predigested information. The same methods will not necessarily prove equally successful in the secondary schools, but the efficiency of those methods in the university suggest that with wise modification they may be effective in the secondary school.

If commercial geography can be so taught that pupils are required to think, reason, judge, and compare, are taught to use reference materials, are trained in presenting statistical matters graphically, learn the value of the use of base maps for showing distributions, and gain an interest in international affairs, then commercial geography will commend itself to educators everywhere, and it will win a permanent place among the studies of the secondary schools.

BUSINESS COURSES FOR HIGH SCHOOLS OF SMALLER CITIES

IRA B. FEE, SUPERINTENDENT OF SCHOOLS, LARAMIE, WYO.

Only within recent years has there been any general demand for vocational courses in the high schools of the country. In former years the academic courses monopolized the attention of school authorities. Gradually there developed a sentiment favoring the inauguration of courses that were utilitarian in character—courses which tended to train pupils for some rather definite occupations. One of the first to receive this stimulus was the business course, and it is of this I wish to speak. I shall further confine myself to the business course as I believe it should be in smaller cities—that is, in cities of from six thousand to eighteen thousand inhabitants.

Those who attended the San Francisco convention of the National Education Association last year, and who were present at the meetings of the Department of Business Education, will recall the excellent address given by Principal Charles H. Murphy, of San Francisco, on the subject, "Curricula for High Schools of Commerce in the United States." The subject was well handled, and the inquiry might well be made why there is any excuse for presenting a discussion on a subject so nearly identical at this time. A careful examination of Mr. Murphy's paper will reveal the fact that it discusses chiefly commercial subjects as they should be scheduled in the largest school systems of the country. The ideal conditions possible in a large city can seldom be realized in the smaller cities of the country. The limited amount of money generally available makes the organization of three or four courses about all that can usually be arranged, and the same cause limits the teaching force so that often only those subjects deemed most essential to a business training are offered.

That I might learn with some degree of accuracy what other school systems are doing in the way of educating pupils for commercial pursuits, on May 17, I addressed letters to superintendents of schools in forty representative cities ranging in population from six thousand to eighteen thousand. I asked for their courses of study, particularly the business or commercial courses. I asked whether both shorthand and typewriting were required, if either was scheduled. The number of typewriters used, the number of pupils enrolled in the business course, the proportion of total enrollment in the business department, the system of shorthand used, whether a two-year course were offered, and reasons for or against a two-year course, were other items of information requested. To forty letters written thirty-one replies were received. Nine of these replies stated that no commercial course was offered. The other twenty-two replied with more or less fullness to the questions asked.

The one thing more noticeable than anything else is the lack of any

uniformity in arrangement of the course. In about half of the twenty-two replies stenography and typewriting were offered first in the third year of a four-year course. Many of the schools offered stenography and typewriting in both the third and fourth years of the course. A number offered but one year of stenography and typewriting, and of those offering more than one year many required only five recitation periods for the work in both branches each week. Bookkeeping in several of the courses was first offered in the first year, and continued in the second. In other courses bookkeeping was scheduled in the third, and again in the fourth year. In some courses bookkeeping was scheduled for but one year of five periods per week. Bookkeeping, shorthand, and typewriting were the only subjects that the superintendents seemed to agree should be taught. Commercial geography, commercial law, commercial arithmetic, spelling, commercial forms, general business practice are other subjects offered in as many schools, and with no uniform arrangement. Fully 50 per cent of all replies from those having a business course stated that stenography and typewriting were both required when either subject was scheduled. Of the remaining replies most stated that all those taking shorthand were required to take typewriting, but pupils were allowed to take typewriting without being required to take work in shorthand. The percentage of total enrollment in the business courses varied from fifteen to fifty. The question as to the desirability of a two-year commercial course was answered almost invariably in the negative. With reference to this point I wish to quote from a few of the letters:

1. We do not have the two-year course in our department. The board of education talked about one but it was counted out on the basis that it would not pay, as everyone would want the people who have finished the four-year course. Personally, I think they are wise.

2. We have an arrangement by which all the work offered may be taken in two years, but we do not encourage this plan. Practically not one is taking advantage of the opportunity. Personally, I do not consider such a plan desirable, except where pupils are mature and have had thoro education before taking the commercial course. Even in this case, I think that commercial schools or business colleges are better equipped to give this work in one or two years, and we advise pupils of this class to go to the business college.

3. We have a four-year course designated "commercial course," but we allow the boys and girls who think that they have not time to complete a four-year course to take the two years of commercial work designated in the course.

4. We do not believe that a two-year course would be satisfactory for the reason that the boys and girls are too young and have not had sufficient training in English to do the work, either as a stenographer or a typewriter. And they have not had the necessary reasoning secured by the study of geometry and higher mathematics or of the sciences. I believe thoroly in a four-year high-school course for any line of work.

The reply of one superintendent who wrote me concerning the subject of this paper shows how large a place this course occupies in his system, and I feel it will be of interest. I wish to quote rather fully:

We use the Gregg system of shorthand. We have twenty-five typewriters, twenty of which are visible Underwoods and five are visible Remingtons. All are of recent models. Nearly one-half of the students in our high school are enrolled in the commercial course and of the graduates last year one-fifth were in the commercial course, and this year about one-third. Our enrollment this year is five hundred thirty-seven. In last year's class there were fifty-seven Seniors, of whom twelve completed the commercial course and of this number six were boys and six girls. In this year's Senior class there are seventy-five students, of whom twenty-eight are finishing the commercial course, and of these seventeen are boys and eleven girls.

We consider the commercial course a very desirable course. First, because it prepares students for the ordinary business transactions which they must inevitably meet in life; second, because students feel that it is a practical course and are interested in it for that reason; and third, because it furnishes them a preparation which has an immediate commercial value upon graduation.

That school men should disagree about the arrangement of subjects in a course is but a sign of a desirable difference in personalities. That they should not agree on the intensity of the work done in the major subjects of the course that make it a business course is not so satisfactory. For example, is it not futile to assume that a pupil can acquire a good knowledge of bookkeeping taken five periods a week for one year, and is it not further complicated if that one year is taken at or near the beginning of the course? It is my belief that if but one year's work is to be done in bookkeeping, the subject should be scheduled in either the third or fourth year of the course, and that two periods each day, five days each week, should be devoted to the subject under the direct guidance of the teacher. I further believe that stenography and typewriting should be studied at least two years and that usually they should be credited as one subject, with satisfactory work required in each branch to entitle the pupils to credit.

It is difficult, I know, to offer a course that will be at all agreeable to school men. I therefore propose a course with considerable trepidation.

1. The course should be four years. More emphasis should be laid on sending from the schools graduates well qualified from the standpoint of both culture and business efficiency. A wider knowledge is needed by clerks and business men than that indicated by mere ability to write legibly, spell glibly, and do bookkeeping neatly.

2. The course should be planned so that it will not be regarded as a snap course. The teachers planning commercial courses have frequently left themselves open to the charge of conducting courses for the mental "lame ducks" by acquiescing to a shifting from the college-preparatory course to the business course of those that have been failures in the college-preparatory, or really making the business course so easy that it has undoubtedly been a snap. The business course ought to offer as strong a training as does any other course in the curriculum.

3. If writing is not made a separate and special subject it should be carefully taught in connection with all the written work of the department.

Poor writing should be discouraged at all times, and doubly so in the business department.

4. Here is offered in outline a suggestive course, the figures following the subjects indicating the number of forty-five minute periods per week that should be devoted to each subject:

PROPOSED BUSINESS COURSES FOR SMALLER CITIES

FIRST YEAR

First Semester		Second Semester	
English	5	English	5
Algebra	5	Algebra	5
Greek and Roman History	5	Greek and Roman History	5
Business Forms, Spelling, Penmanship	5	Commercial Geography	5

SECOND YEAR

First Semester		Second Semester	
English	5	English	5
Plane Geometry (El)	5	Plane Geometry (El)	5
Commercial Arithmetic (El)	5	Commercial Arithmetic (El)	5
History of Commerce	5	Commercial Law	5
Stenography and Typewriting	10	Stenography and Typewriting	10

THIRD YEAR

First Semester		Second Semester	
English	5	English	5
Physics (El)	8	Physics (El)	8
Modern Language (El)	5	Modern Language (El)	5
Stenography and Typewriting	10	Stenography and Typewriting	10
History (El)	5	History (El)	5

FOURTH YEAR

First Semester		Second Semester	
English	5	English	5
Modern Language (El)	5	Modern Language (El)	5
Bookkeeping	10	Bookkeeping	10
Chemistry (El)	8	Chemistry (El)	8
Algebra (El)	5	Solid Geometry (El)	5
Civics	5	Economics	5

"El" stands for elective.

If third-year modern language is elected, it should be carried in fourth year.

If the mathematics is elected in fourth year it presumes a previous election of plane geometry.

Four subjects should usually be carried each semester.

I believe that the course above outlined is sufficiently strong to prepare pupils well for the work expected of the course. The purely commercial branches are interspersed with subjects generally informational and cultural in character. The amount of time that is devoted to the major subjects of the course seems sufficient. Naturally the success or failure of this course, as in all teaching, rests largely with the teacher. If the teacher is earnest, sincere, and faithful, and, above all, requires exact and neat work of his pupils, the course ought to be able to train boys and girls effectively.

ACCOUNTANCY IN RELATION TO BUSINESS ORGANIZATION AND MANAGEMENT

SEYMOUR WALTON, C.P.A., DEAN OF THE WALTON SCHOOL OF ACCOUNTING, CHICAGO, ILL.

The establishment upon a firm foundation of the profession of accountancy has had a marked effect upon business methods, both as regards the organizing of an enterprise, and its subsequent management. The influence of the new profession will continue to increase in importance as its principles become better understood by the general public, whose information on the subject at present is vague and uncertain.

As a first requisite to a proper understanding of the subject, it is necessary to differentiate between bookkeeping and accountancy. Bookkeeping deals with the facts that are presented to it, records them as they occurred, and renders a correct mechanical statement of them. Accountancy deals with the far more difficult task of ascertaining upon sound commercial and financial principles the actual facts connected with any business whether they have been recorded on the books or not. The bookkeeper writes the diary of a business, the accountant writes the philosophy of its history. The accountant must thoroly understand the processes of bookkeeping, the bookkeeper does not need to know anything but the merest rudiments of accountancy.

Such being the case, it is manifest that the accountant who is worthy of the name is something more than an expert arithmetician, capable of making additions and other calculations with lightning-like rapidity and absolute accuracy. This sort of proficiency is valuable, especially to the junior, who is called on to do the routine work in an accounting investigation. Far more essential to the scientific accountant is, as Dr. Henry Van Dyke says, "the power to apprehend and distinguish, to weigh evidence and interpret facts, to think clearly, to infer carefully, and to imagine vividly."

It has taken the professional accountant a long time to show the business public the true meaning of the word accountancy, and still the lesson is only partially learned. The business man who would not think for a moment of intrusting an important legal case to some youth because he had been a clerk in a lawyer's office for a year or two, will depend upon the advice of some bookkeeper out of employment, who styles himself an "expert" accountant because he can add three figures at once, or will reorganize his factory at the instance of some man who, because he is familiar with a successful cost system in a single line of manufacturing, imagines that he has a complete grasp of all manufacturing problems that may be presented to him.

The bookkeeper who thus undertakes a task that is beyond his powers is not always to blame for the results of his temerity. It is more than

likely that he has never been told that there was any such thing as a science of accounts. He has been taught how to do certain things, but not why he does them, possibly because his instructor did not himself know why. If he has the curiosity to ask why, he may be vouchsafed the answer that was actually given by a professor in one of our most prominent business colleges: "We make the entry in that way, because that is the proper way to make it." He is given endless rules that he is expected to memorize and to apply in a proper manner, but is not told the principles on which the rules are founded, so that he may have an intelligent idea in regard to them. He is told to credit the purchases account at the end of a fiscal period with the inventory, but is not shown why that action causes the comparison between the purchases account and the sales account to show the gross profit on sales. Until the instructor learns to replace his mere *ipse dixit* with the scientific reason for his teaching, the pupil cannot be expected to know anything but his blindly applied rules. We need less bookkeeping by rules and more knowledge of primary accounting principles in our offices.

By showing the business man the bearing of some of these accounting principles upon practical business questions, the professional accountant has been able to demonstrate the value of his services. In the organization of a business to be conducted by a partnership, it is very seldom the case that an attorney will have sufficient accounting knowledge to express properly all the conditions embodied in the articles of partnership, so that they can be understood plainly by all the parties in interest. Not being conversant with the accurate definition of accounting terms, the attorney may, and frequently does, use them in an entirely wrong sense, with the result that a quarrel between the partners causes vexatious and expensive suits at law to determine what is the real meaning of the phraseology used. If the attorney should submit the articles to the scrutiny of a competent accountant, he would avoid the danger of such ambiguous phrases and of the consequent litigation.

In the drawing-up of other contracts which are to form the basis of a new business, the services of an accountant are indispensable. Neither the attorney nor the business man has a sufficiently broad view of the subject covered to insure an accurate description of the points involved, nor the ability to express himself in language that cannot be mistaken. The experience of the accountant has given him an opportunity to observe the different ways in which certain terms are construed by different persons, and has taught him to use only those terms about whose meaning there can be no dispute.

The most important service rendered by the accounting profession to the business world in connection with the organization of new enterprises has been the insistence upon scientific principles in the valuation of the assets upon which capitalization is based. While it is true that the accountant

cannot always make a board of directors or a promoter adopt his views, he can put himself on record in regard to them. In this way he is gradually educating the general public as to the proper treatment of good will and its valuation in the accounts, of the discount on stocks and on bonds, and especially as to the nature of capital stock, as representing the undivided ownership of the net worth of the company, and not necessarily the amount of money called for by the face value of the certificates of stock outstanding.

The importance of this education is shown by the fact that the postal authorities have discovered that one hundred million dollars are lost to the small investors of this country every year thru the purchase of worthless stock offered in a most alluring form by unscrupulous promoters. If the investing public could be taught to demand the preparation of a proper balance sheet and revenue statement by a competent public accountant before they would consent to invest money in any such enterprises, great good would be accomplished, not only in saving money to those who can ill afford to lose it, but also by turning the money into the treasury of really meritorious enterprises. In the cases where no statement of operating conditions is possible, as in undeveloped mines, the accountant can point out that the putting of money into such schemes is not in any proper sense an investment, but is a speculation which does not differ very much from gambling. In cases where several businesses are merged into one, or where an old business is reorganized, the accountant can render invaluable assistance to the investor by presenting him with a true statement of the conditions, showing how much real value is represented by the stocks and bonds, and how much the stock has been watered by the inclusion among the assets of false values for the good will, the franchise, or the patents and trade marks turned over to the new company. While it is not within the province of the accountant to prophesy as to the future of any business, especially when the conditions have been changed by merger or reorganization, it is his duty to give such a history of the old business that an intelligent idea can be obtained of its conditions, both as to the value of its assets and as to its earning power. He must go even farther, and refuse to certify to undoubted facts, if he has any reason to believe that his having done so to a limited extent may be made the excuse by unreliable promotors for the statement that the company has been investigated by him, leaving the intending investor to infer that the investigation has been a thoro one, amounting virtually to an indorsement of the enterprise by the accountant.

The value of the services of any man depends upon his professional ability. While the fact that a person is a certified public accountant is presumptive evidence of his ability, it is not necessarily conclusive. His general reputation must be inquired into. There is a safeguard offered to the investing public by the supervision that is exercised over their members by the state societies of certified public accountants and the American

Association of Public Accountants. These organizations are interested in keeping up the standard of the profession, and will voluntarily proceed against any accountant who has been guilty of misconduct, if adequate proof of his delinquency is obtainable.

As the organization of any business occurs only once, when the enterprise is inaugurated, while the management of the business continues during all the years of its life, the influence exerted by the accountant is most important when its effects are apparent in the routine course of the business. From his knowledge of the fundamental principles governing all commercial conditions, he is able to give the manufacturer and the merchant reliable advice, which will show them not only where they can stop leaks and institute economies, but also where they can add materially to the earning power of their business. By insisting upon a proper method of stating conditions, the accountant can show the business man the direction in which he is unconsciously drifting, and can perhaps warn him to change his course before it is too late.

Ignorance of accounting principles often leads a business man into self-deception, the effect of which may be disastrous in the extreme. In fact, errors arising from ignorance are more likely to be a source of disaster than willful pursuit of a course that is known to be incorrect. The man who knows that the steps he is taking are leading him in the wrong direction usually intends to change his methods, whenever it becomes convenient or possible for him to do so. The ignorant man does not know he is making mistakes, and therefore does not take any steps to correct them. He goes blindly on his way, serenely confident that all is well, until he is suddenly confronted with irretrievable disaster.

There are so many ways in which men deceive themselves about the condition of their own affairs that only a few of them can be mentioned. Among them are a lack of due regard for the effect of depreciation, ignorance about the proper methods of taking and valuing inventories, the lack of ability to distinguish between a real and a fictitious profit, and a total ignorance as to the cost of the goods they manufacture. The trained accountant should be able not only to formulate rules for their guidance, but also to give them intelligent reasons for the methods that he may install in factory or office. He should be able to institute such comparisons between the results of successive years that the cause of an increase or a decrease may be readily ascertained, so that those things which make for greater profits may be stimulated, while those that tend to diminish profit may be, as far as possible, eliminated.

In all these things the accountant is not restricted in his conclusions merely to the information that he can obtain from the books and the accounts. If he finds from the manufacturing statistics that the raw material cost is increasing, he must try to ascertain the reason for the increase. It may be that it is caused by the exhaustion of near-by sources

of supply, necessitating the paying of excessive freight on heavy material. It may be that the quality has deteriorated, necessitating the use of a greater gross quantity to produce the desired net result. It may be that proper arrangements have not been made for the purchase of material for future delivery to meet the requirements of contracts that it may take a long time to fill. Whatever the cause, he should be able to point it out, altho he may not be able to suggest a remedy. It is sufficient if he is able to indicate where the trouble resides, leaving to the practical business man the task of finding an adequate remedy, if such is possible.

In regard to labor, he must not be satisfied with surface indications. The mere fact that daily wages are higher in one place than in another does not necessarily mean that the work of the higher-paid men is more expensive than that of those whose wage is lower. The higher-paid men may be more economical on account of their greater efficiency. The conditions surrounding the workmen are potent factors in determining the amount of work that they can accomplish. While the accountant is not a philanthropist, the inexorable logic of his calculations will show that more and better work will be done in well-lighted and well-ventilated shops than in dark ones full of impure air and noxious vapors. Even the conditions that surround the men outside of the shop are important. If their homes are light and cheerful, they will find rest there that will fit them for better work as they return to their daily toil in the factory. Accountants have been taught that a proper care of the machinery of a factory is essential to its being kept at the requisite standard of efficiency. They are now beginning to see that a proper care of the human element is no less important, if wasted energy is to be prevented. Quite apart from any altruistic motives of humanity, they are teaching the large employer of labor that it pays to be humane.

The accountant may go farther than this. He is accustomed to teach that, altho a machine may deteriorate little or nothing in the first period of its existence, the inevitable depreciation must be provided for from the very beginning, and that a certain reserve must be taken out of the yearly operating profits to provide for this depreciation. It is only a slight extension of this principle to apply it to the human beings whose usefulness is being exhausted equally with that of the machinery under their charge. If a reserve is set up against the eventual loss of the machine out of the profits which the machine has helped to make, it is equally logical to set up a reserve against the eventual loss of the laborer out of the profits to which he has contributed, so that in the end he may not be thrown into the human scrap heap, but may enjoy the benefits of the reserve that has been established for him in the form of a pension that belongs to him in pure accounting justice, and not one that is given him as charity.

Again, the business is obliged to meet the expense of sudden and unexpected losses by unforeseen accidents. If a careless workman causes the

destruction of a costly machine by his neglect of duty, the business cannot refuse to charge off the value of the machine because it was not the fault of the management that it was destroyed. If the accidental destruction or injury of a machine is so much a contingency of the business that it must be provided for in the accounts, it is no less in accordance with accounting principles that unforeseen accidents to workmen rendered almost, if not quite, unavoidable by the complex nature of modern machinery should be equally considered a charge against manufacturing costs.

In these and many other ways, such as the proof from accounting statistics of the false economy of child labor and of excessively long hours for women workers, the accountant is able to give valuable aid to the philanthropist and the economist in their endeavors to ameliorate the conditions under which modern business is being carried on.

A volume might be written on the various ways in which the accountant can be of value to the business man both in the organization and management of complex modern enterprises. Enough has been said to prove the point. The practical side of the question is that the accountant needs more help in his work than he has been receiving from the educators of the country. He finds that the business men have so little knowledge of accounting principles that they are often totally unable to understand them when they are asked to apply them. He finds that very few bookkeepers, however expert they may be in their routine work, have any real accounting knowledge.

It is not too much for the accountant to ask that scientific accounting should be taught in the high schools and business colleges at least. This does not mean that every student of these schools should learn advanced accounting, and be prepared at once to pass an examination before the state board of examiners for admission to the ranks of the certified public accountants. It does mean that he should be taught something more than the rules of bookkeeping, that while he is learning these rules, he should also learn the principles that underlie them. He should not only know how to keep correct accounts, he should also know why they are correct. Only in so far as he knows the reason for what he does, does he really know how to do his work most effectively. This form of education would be essential, even if the only objects were to make thoro bookkeepers. It is much more important if the aim of the schools is far higher than this, if their object is to furnish an education that will enable a person to understand the processes and results of bookkeeping, whether he intends to keep books himself or not. The business man in charge of an office should know how his accounting staff conducts its work, and should be able to understand the statements that are laid before him, and should know whether those statements are made up on the right principles. Unless he is possessed of this general knowledge, he is in the position of a master builder who knows so little of carpentry or masonry that he cannot tell what is wrong with the

work of the carpenters or masons, and cannot instruct them as to the correct way in which their work should be done.

If every business man had this fundamental training in accounting principles, he would avoid many mistakes that now seem inevitable. At present it becomes the task of the professional accountant to give him this instruction, but, unfortunately, the accountant is frequently called in too late to prevent the mistakes being made, and often too late to suggest and apply the proper remedies. In many cases the accountant is not consulted at all, as he would have been if the managers of the business had been taught originally that there was such a science as practical accounting as distinguished from bookkeeping.

ESSENTIALS OF PRACTICAL PENMANSHIP

J. H. BACHTENKIRCHER, SUPERVISOR OF PENMANSHIP,
PUBLIC SCHOOLS, LAFAYETTE, IND.

Someone has said, "The greatest gift to mankind is speech; the most useful art is writing. Speech distinguishes man from the brute creation; writing from the uncivilized savage." If this be true I am sure I could name some savages who are not residents of the National Indian Reservations. In a recent investigation conducted by the Department of Child Hygiene of the Russell Sage Foundation, writing is divided into three classes: vertical, medial, and extreme slant. Penmen may be divided into standpatters, progressives, insurgents, and pit-a-patters. The first may be those who like the all-copy book method form with little or no freedom; the second, those who believe in teaching form, freedom, and control at the same time; the third, those who teach movement regardless of form or neatness; the fourth, those who think any old way will do.

Handwriting is but a mechanical device. It is but the record of the movement of a set of muscles which cause the recording implement, the pen, pencil, or crayon, so to move over the paper that a series of symbols is produced and the symbols record a thought, fact, or message. Considering the essentials of good penmanship, legibility is of first importance, speed or freedom second, and beauty is of little value. However, any penmanship that is written with ease and rapidity usually is beautiful, tho sometimes illegible. Our unconscious movements naturally are graceful; therefore, a record of these movements naturally would show a combination of graceful curves and lines sufficiently beautiful to harmonize with the average business man's idea of the ornate.

In some occupations and positions the beautiful in penmanship is essential, such as policy-writing in the insurance business; but in the general business world little or no premium is placed upon beautiful writing. In the social world women of fashion would scorn to acquire a pretty hand.

It would not be considered smart; their writing might be taken for that of a teacher, bookkeeper, or tradesman. Writing presupposes a reader. In the usual run of circumstances there are two parties to a written piece of paper, and each is entitled to a certain amount of consideration. If the writer has little or no regard for the opinion or convenience of the reader, he may show it in his slovenly, tangled-up handwriting, while in proportion to the opinion he desires to create, will he use care in his writing. Most cases of "handwriting horrible," such as is popularly believed to be resultant of ultra-mental development on the part of lawyers, university graduates, high-school teachers, and some college and university professors and other notoriously bad writers, is really a selfish disregard of the rights and comforts of readers, or professional mannerism.

No doubt there comes a time in the life of nearly every student when he feels that there is a certain amount of prestige attached to the ability to create an indecipherable signature. It is said that the penmanship of Horace Greeley was so famous for its illegibility that they still tell in Printing House Square the story of how he wrote a note of dismissal for one of his men and the victim of it ever afterward used it as a letter for recommendation. No one could read it, and the claim of the man who presented it, that it was a certificate of good character and unquestioned ability, was as indisputable as the facts in some of the works of Rider Haggard. The following anecdote related in *Human Life* may be appropriately quoted in this connection.

Dr. Edward Everett Hale used to tell of an amusing letter once sent by Thomas Bailey Aldrich to Professor E. S. Morse, whose handwriting was very illegible. According to Dr. Hale, Mr. Aldrich wrote as follows:

MY DEAR MORSE:

It is very pleasing to me to get your recent letter. Perhaps I should have been more pleased had I been able to decipher the same. I have not been able to master any of it beyond the date, which I knew, and the signature, which I guessed at. There is a singular and perpetual charm in a letter of years; it never grows old, it never loses its novelty. One can say to one's self every morning: "Here's that letter of Morse's. I haven't read it yet. I think I'll take another shy at it today, and maybe I shall in the course of a few months be able to make out what he means by those *t*'s that look like *w*'s and those *i*'s that have no eyebrows." Other letters are read and thrown away, but yours are kept forever—unread. One of them will last a reasonable man a lifetime.

Admiringly yours,

T. B. ALDRICH

In good penmanship the curves and straight lines which the writer puts together to express his thoughts must be so ordered that they can be easily read. The forms of the letters must follow established standards so as not to compel the reader to acquire the art of interpreting as many modes of writing as he has correspondents. It is of the greatest importance then, that the handwriting shall be so sure, so readable, so distinct, that it is as easily read as the columns of the daily paper.

Second in importance in the essentials of good penmanship is speed. Why? Well, if John can accomplish more work of the same quality in a given time than James, he will, if other things be equal, be more successful than James. Good penmanship should make for expeditious writing so that the flow of thought may not be interrupted. The greater the effort required to write, the slower and more disconnected the thought. Labor in penmanship is not unlike the efforts of a man who tries to write a letter on a typewriter before he has trained his hands automatically to locate the keys. Freedom in writing is liberated ideals set in motion, that act of self-consciousness which gives relaxed action of muscles; that mental concept of the thing to be made which gives confidence and ability to write; that understanding on the part of teachers and parents which takes advantage of the motor sense in the student or child and guides his efforts along the line of least resistance until power to write legibly, easily, and continuously is acquired.

Freedom comes with correct mental ideals. Freedom in writing can only keep pace with mental and muscular growth. It may be likened to learning to walk, play the violin, dance, skate—a matter of repeated effort until the muscles co-ordinate and involuntarily produce definitely what the mind conceives and the brain wills. Movement or freedom in penmanship, therefore, can be attained only by much patience, painstaking and thoughtful practice with proper, intelligent method and materials. Technically speaking, speed or freedom in writing means power and skill to write letter forms and words.

Getting freedom has to do with the muscles and is, therefore, a muscular process. Form is intellectual acumen. Freedom is muscular training. Form requires thought and memory. Speed requires thought and action. Writing without form is impossible. Writing without freedom is impractical. Legibility and speed, we must conclude, are the prime essentials of good penmanship. Beauty may be a desirable quality altho not essential. Quoting further from recent investigations by Dr. Ayres of the Russell Sage Foundations: "The investigation developed several important facts as to the relation between legibility and general appearance of handwritings. The most important of these is that, whereas extremely legible writings are almost invariably of good appearance, many writings of good appearance are of relatively low degrees of legibility."

Analysis of good-looking writings of low degrees of legibility shows that their most common shortcoming is the crowding together of words on a line. This indicates that those systems of penmanship are vicious that teach children to space their words so closely that the final stroke of the last letter of one word extends over the initial stroke of the first letter of the following word. Also crowding the letters on a line so that the elements and principles are thrown out of position, as to form and slope, is another common fault. Next to close spacing of letters and words

horizontally, comes too close spacing between lines as a characteristic making for illegibility.

Another common fault in good-looking writings that are difficult to read is the breaking of lines in the middle of words in such a way as to make one word look at first like two words. The absence of dots over the *i*'s and crosses on the *t*'s is also a common and important shortcoming of good-looking writings that are difficult to read.

SLANT AND QUALITY

Quoting further from the same report: "A preliminary study of the relation between the several slants and the quality of the writings indicates that in general the vertical writings are the most legible, the medium slants next, and the extreme slants next. The following figures show median rates in words per minute at which the writings of each style were read:

Vertical	255 samples	180 words per minute
Medium slant	670 samples	176 words per minute
Extreme slant	580 samples	172 words per minute

SLANT, SPEED, AND QUALITY

"The comparison shows that there is a slight but steady falling-off in the average number of words written per minute as we pass from the poorer writings to the better ones.

	Number of Samples	Total Number of Words	Average Number of Words Written in Ten Minutes
First quarter of distribution	394	46,535	118.1
Second quarter of distribution	395	46,592	117.9
Third quarter of distribution	395	45,449	115.1
Fourth quarter of distribution	394	42,728	108.4
(First quarter's distribution, poorest writings)			
(Second quarter's distribution, best writings)			

SLANT AND SPEED

"The figures with respect to slants and speeds are as follows:

	Number of Samples	Total Number of Words	Average Number of Words Written per Minute
Vertical	255	29,402	115.3
Medium slant	670	76,779	114.8
Extreme slant	580	67,369	116.1

The foregoing figures make an even showing for the different styles, which comes as a distinct surprise to the writer of the present report. The comparison of qualities showed that the vertical writings are the most

legible of the different styles. The figures just cited show that the extreme slant writings are a little ahead of the other styles with respect to speed of writing. In short, the meaning of the figures is that the different writings are surprisingly equal as to legibility and the speed at which they are written.

From the foregoing I am constrained to believe that good penmanship is that which can be easily and quickly read and easily written. It should be simple in construction, easy in execution, well spaced, both laterally and horizontally—normal in slant and normal in action.

A PRACTICAL DEMONSTRATION OF THE RELATION OF A MODERN ADDING MACHINE TO ACCOUNTANCY IN THE HIGH-SCHOOL COURSE

THOMAS L. BRECHEEN, FREMONT HIGH SCHOOL, OAKLAND, CAL.
DEMONSTRATION BY MARIE SISSON, STUDENT, FREMONT HIGH SCHOOL, OAKLAND, CAL.

We are in an age of conservation of time and labor. The busy business man is on the lookout for systems and appliances for increasing the productiveness of brain and brawn. He is willing to pay the price for labor-saving machinery and anxious to employ the engineer to operate it. He is ever alert to stop losses and increase net income by avoiding mistakes, stopping leaks, and improving service. He is seeking for men and women of intelligence with specialized education and training, and has found by experience that the best investments in the long run are the wages paid to people who know their business thoroly and "get there" with results.

Today no one would for a moment think of conducting a merchandise store without a cash register, and where any weighing of consequence is demanded, the computing scale is considered a necessity. The cash carrier has replaced the cash girl, and writing machines are as common as sewing machines became years ago.

As typewriters have displaced penmanship in wide fields, increasing the scope and possibilities of written language, without detracting from the value and importance of rapid, legible, artistic chirography, so are modern computing machines sure to supersede the old pencil method of accounting and handling all mathematical problems, without, in the slightest degree, lessening the absolute need of proficiency in mental and written arithmetic.

Just as the experienced mechanic, skilled in manipulating and controlling wonderful machinery doing the work heretofore requiring the hands of many men, is more valuable and paid a higher wage for his intellectual efficiency, so will the accounting clerk of the future knowing and experienced in the use of these most valuable of all office appliances command an advanced position in salary and general estimation.

The development of devices of this kind, in results and adaptability, requires time and experience in their use. So many possibilities are opened up by the suggestions of the public user, that ofttimes the original type or model is so changed that it is no longer recognized.

The earliest adding-machine efforts were those of the non-listing class and aimed at nothing but adding or accumulating numbers and indicating the resulting totals by dials. Later, machines were placed upon the market which recorded upon a slip of paper the items listed or added—a very decided advantage in checking the work. Until very recently all (or both) of the above types were planned and equipped with a separate set of numeral keys for each column, requiring very large keyboards, thus making touch method of operation impossible. The necessary omission of the cipher, or space bar column-mover, in the large, so-called 81-key machine, with no substituting provision, confined its use to listing and adding only, and prohibited its practical and more extensive adoption in the schoolroom in handling all four elementary principles of arithmetic. In fact, attempts to use these types of adding or computing machines in the schoolroom have thus far not proven satisfactory and in many instances brought them into actual bad repute, for the reason that, while the student was quite willing to use it to save labor, he learned nothing by the operation.

There is now being extensively introduced into business colleges and public schools an adding, listing, and calculating machine, resembling the modern visible typewriter, which first attracted my attention because of its apparent simplicity of plan and construction—a machine with but ten numeral keys, operated at high speed by touch method and capable of handling multiplication, subtraction, and division with equal celerity and accuracy. From an examination of this machine I was persuaded that it was peculiarly adapted as a laboratory instrument in illustrating the principles of arithmetic and the processes of applying the same, and about three months ago two of these machines were installed in the John C. Fremont High School, of Oakland, with which I am connected, by a school representative of the Dalton Adding, Listing, and Calculating Machine Company, with class demonstration of the uses to which it might be put in the schoolroom, as well as in the business world.

From the very start I found among the pupils of my department, as well as from other departments that had access to this machine, increased interest in the science of mathematics, with consequent better progress by even the very dullest pupils. I was surprised and gratified to have discovered an instrument that, if it had not taken the place of the ordinary text, was certainly a wonderful help to both tutor and pupil. The book of higher mathematics appeared by this instrument to be brought so much closer and its hidden beauties made so transparent, that the pupil was able to make marvelous progress from the very start and his further progress was accelerated beyond any previous experience in the schoolroom.

Most, if not all of us, realize that, as arithmetic is being taught, too much time is necessarily consumed in memorizing tables and in learning to mentally add and multiply several columns at one operation, and other processes depending upon laborious repetition, rather than upon logical reasoning; methods that absorb the best efforts and energies in committing to memory, instead of developing the ability and disposition of the pupil to think for himself. It would seem that we have been forced by past conditions in teaching arithmetic, to work against and to the disadvantage of the best aims in other directions—the development of the mind of the pupil as a thinking being.

I therefore hailed with delight a machine which, by eliminating unnecessary, unprofitable drudgery of the study, presented increased opportunity for more intellectual treatment and growth; and the results of the few months' drill in the progress of my pupils has been most extraordinary and has proven beyond any doubt, in the minds of those who have watched the work, that the introduction of such an instrument means great things for tutor and pupil in the commercial schools of the land, as well as in all departments, including the lower grades, where arithmetic is taught. In short, experience thus far has very positively indicated that the student's progress would be even more marvelous if these improved methods of teaching with the machine the elementary principles started from the very beginning of the study. It is specially noticeable that those students whose accumulated energies—physical and mental—are given simultaneous play in pleasing occupation of both mind and hand (that human instrument second in importance to the intellect itself) get along best, and that the present-day methods of teaching the technique and culture of written language with the writing machine has greatly increased the quantity and quality of results attained in a given time with a given amount of effort of tutor and pupil.

This is but an advanced extension of kindergarten methods into the higher grades and the introduction of the elements of play into work, the making of study a pleasing pastime, instead of a tedious task. So, increased interest in mathematics upon the part of pupils having access to the adding and calculating machine is explained partially by this principle of modern teaching methods, and partially by the facility with which tutor and pupil are able to examine, illustrate, and understand the mathematical principles involved in each process of every computation.

By the use of this complete mathematical instrument in the schoolroom and the methods necessarily pursued in its operation, an entirely new view of arithmetic is brought out, and many interesting features of the science that otherwise usually remain little realized or appreciated are made plain as day. The exactness of the science in the matter of column position and its progression in the carrying of tens from right to left in accumulating numbers and from the left to right in extracting numbers, in addition,

multiplication, subtraction, and division—the fixed power of each of the unit numerals 1 to 9 and the relationship of each to the cipher or mathematical space bar column-mover, are illuminated as seldom seen by a student of past methods of study and teaching.

One interesting feature of the science of mathematics almost wholly obscured in ordinary methods of teaching is that necessarily employed with the adding machine in extracting numbers by the use of the "complement." Since the wheels of the machine turn but one way, forward, accumulating numbers in a direct manner but not extracting them in a similar way, a method has been provided for subtracting (taking away) numbers by adding (putting in) instead, certain others, which method accomplishes the same result in a very expeditious, correct, and satisfactory manner.

Analysis and complete understanding quickly reached by the student of the difference between the use of the mathematical complement to clear columns occupied by the numbers to be extracted and of the prefixed 9's in the remaining column capacity of the adding machine, in order to carry to the left entirely out of the machine the accumulated unit 1 of the 10's, have proven most beneficial in school work and comprise one explanation of the marvelous progress made by our pupils who have had an opportunity to learn the adding and calculating machine with the systems inaugurated for its use.

Another noticeable benefit is the increased occasion and opportunity to illustrate and apply the principles of mathematical inversions or transpositions, equally dependent upon the decimal principle of the science, by converting into a decimal fraction form the common fraction composed of the divisor as the denominator under the unit 1 as the numerator. Students are with the adding and calculating machine much more easily led and self-inclined to make use of the quickest method of reaching correct results, whether the process be addition, multiplication, subtraction, or division.

The process of multiplication is ofttimes greatly expedited by short methods involving the use of the repeated complement, and problems consisting of numbers vastly exceeding the column capacity of the machine are by new systems made easy.

Division is the most tedious of all processes, including, as it also does, multiplication and subtraction. Multiplication being an extremely speedy process upon the Dalton, affording a constant, perfectly visible check upon the work, it is found frequently desirable, where the decimal equivalent (reciprocal) of the divisor is known or may be quickly arrived at in the mind or in tables, to use the reciprocal multiplier, instead of division.

Absence of common fractions from the adding and calculating machine increases the keenness of the pupil in converting them into decimal equivalent forms and instantly bringing to his mental vision the corresponding (dual) figures of each.

Teaching from most modern mathematical textbooks is thus made

easier and much more productive and satisfactory by the use of the adding and calculating machine from the very start, and results attained in more advanced work, in short-method systems by the machine, are simply wonderful, amounting almost to mental and mechanical jugglery of numbers.

The universal demand for adding and calculating machines manipulated by people educated and trained in machine mathematical systems, and able to perform much more work with accuracy and increased satisfaction to all concerned, is conceded sure and certainly immediately at hand. Commercial schools must, therefore, face this evolutionary front, regardless of how much or how little older methods may necessarily be departed from.

Realization of this inevitable future first interested me in this device and to my intense satisfaction I have found such changes as have been inaugurated automatically bring with them unexpected relief to both tutor and pupil, with unforeseen benefits to the latter heretofore just out of his reach. Believing that it is the duty of the educator to be constantly alive and alert to progressive methods, and to investigate and, if they appear worthy, test, prove, and report their merits or defects, I have taken it upon myself to bring with me to this convention one of the pupils of our John C. Fremont High School, of Oakland, and to give physical demonstration of her performance upon the Dalton Adding, Listing, and Calculating Machine in touch method of adding, multiplying, subtracting, and dividing, with interesting illustrations of results in computations obtainable by the machine and modern machine mathematical systems.

In order to save time a schedule of these demonstrations has been outlined, starting with the simpler work and proceeding by progressive stages to more complex processes, as well as practical examples arising in commercial business, which I hope will be found as interesting to this convention assembled, as they have constantly been to myself. There will be abundant opportunity for personal inquiry and examination of this work while this young lady is here, and both she and I will be pleased to discuss and explain the use made of this instrument, especially in the schoolroom.

I have pleasure in introducing to you Miss Marie Sisson, of Oakland, Cal., who has come a long way from her home in the Golden West, the land of ceaseless spring weather, thru the scorching plains, sandy deserts, and corn-making land and season, to show any from Missouri or elsewhere, who may wish to know, how we won the pennant in three months by playing ball on the Dalton Adding, Listing, and Calculating Machine.

In adding and listing by this machine I remind you that the keys are depressed for proper figures just as they would be written in regular order from left to right with pen, pencil, or typewriter. Absolutely no attention is paid to any column position, the machine automatically performing this function. Thus the operator is relieved from attention to the mechanical part of the work, free to watch the copy and the results printed in full view.

Note position of operator at left of machine in front of the table leaf

upon which copy rests, the left hand keeping track of the items, while the right hand operates by touch method the ten numeral keys. The smallness and simplicity of this keyboard, and the light touch and slight depression required to manipulate them result in great speed, with slightest likelihood of error.

On electric Daltons a small space bar performs the work of the operating lever, with maximum speed and minimum effort.

Dictation to the Dalton operator is particularly convenient, on account of its simplicity, visible printing, and absence of column position requirements; and numbers may be listed and added or not added, at the will of the operator.

NOTE.—The demonstration consisted of exercises in addition in which the amounts were copied in one case and taken from dictation in another; exercises in eliminating and testing; exercises showing the various methods of correction; exercises in subtraction, where the extractions were made by adding the complement and also illustrating the use of repeated complement; exercises in multiplication, examples within the capacity of the machine and extended examples beyond the machine's capacity which had to be divided into sections for completion; exercises in common fractions and decimal fractions; exercises in division showing the use of mathematical complement, decimal equivalent, etc.

The demonstration was exceedingly interesting to those who were present, but cannot be reproduced in its entirety.

ROUND TABLE CONFERENCE

TOPIC: SHORTHAND AND TYPEWRITING

A. EFFICIENCY IN PRACTICAL DETAILS, OR TECHNIQUE, OF THE HIGHEST IMPORTANCE

GEORGE A. BOHLINGER, NEW TRIER TOWNSHIP HIGH SCHOOL, KENILWORTH, ILL.

In wording the above topic the author of the same was no doubt impressed with its vital importance. He tells me that it took some effort on his part to find someone who was willing to face the subject. The subject is indeed highly important to me, too, and if there is anything I can say that will give my audience some inspiration on this phase of the work I shall feel amply repaid for my efforts in trying to put into presentable form what I consider a few practical ideas. In my thirteen years' teaching experience as a shorthand teacher I feel that I am in a position to convey a message to my devout listeners. It has always been my consistent practice to make a marked distinction between the theory or beginning course of shorthand and typewriting and the advanced course. I have seen teachers who have tried to introduce innovations into the beginning part of the shorthand course. Such a procedure is not only impracticable but unpedagogical as well. The student must have a clear conception of every individual detail of his course covering the principles. He must not only have the most vivid and clear conception of the principles but unhesitatingly be able to express in written form the matter embodying the principles, first under their various chapters and then miscellaneously. The simpler processes of invention must be cultivated from the very start but advanced and perplexing forms should not be attempted. Even in the advanced work the drills on invention must be natural so that the principles involved are at once apparent.

Shorthand and typewriting are inseparable. At least we do not think of teaching one exclusive of the other. The processes involved for the mastery of one are equally requisite in the mastery of the other. The wording of my subject would seem to involve two distinct ideas. Is there any marked difference in emphasizing the necessity of becoming efficient in the practical details of shorthand and typewriting or the acquisition of the technique, the technicalities, the theory, the science of the subject without the practical side of it, if you please? There is a distinction between the technique and the practice of shorthand and typewriting but the practice is so closely allied with the technique or theory that we cannot conceive the idea of teaching the subjects theoretically only. If we were to teach the technique only, we should tell the student all about the typewriter, the position of the keys, how to use the fingers, the mechanism of the machine, how to take care of it, how to insert the paper, how to manifold, tabulate, etc., but without putting him to actual work and causing him to become an accomplished operator by following a fixed course of instruction, training him to use the fingers of both hands correctly, cultivating a required touch, etc., we should be wasting ours and the student's time. Likewise in shorthand we may merely teach technique and the student may get the theory by simply acquiring the principles and by reading shorthand matter from books and magazines, but unless he gets down and uses his pencil he will never become a stenographer, not even a poor one. A man may know much about music theoretically yet not be a musician.

In regard to the two subjects under discussion, technique and practice are inseparable. When the first lessons in shorthand and typewriting are presented to the student he is at once supposed to practice them over and over a certain number of times until he can recite the shorthand lesson and be able to write readily and without hesitation every word, phrase, and sentence in it, and do his typewriting lesson by writing by touch, using his fingers correctly, the required exercises. Others before me have, no doubt, discoursed learnedly on the subjects of typewriting and shorthand and what to do and how to do it and all this and that. I have read some of these articles and listened to many talks and papers on the subject but as a rule they dwell too much on generalities. I have seen shorthand teaching good, bad, and indifferent. It would seem that in many business colleges and high schools the idea prevails that there is no pedagogy involved in the teaching of shorthand and typewriting; that anyone who has a smattering knowledge of the subjects, as is often the case in our high schools, one with an A.B. or some other appendage to his name, but who has never specialized in the subjects, is qualified to train stenographers. The shorthand teacher must be a specialist. As a specialist he should be enthusiastic over his subject and this enthusiasm he should impart to those under his instruction. He must be able to show his students that there is more in typewriting than merely to punch the keyboard and that writing shorthand is more than merely to make nonsensical illegible marks on paper. He must be able to make his students understand that there is a science in typewriting; that the touch, the same as in music, must be cultivated; that getting out a clean, evenly written page at a certain rate of speed means accomplishment; that in shorthand to comprehend clearly and distinctly the entire technique of the art is the foundation of success; that the training of the mind and hand to act quickly, and the training of the eye and the hearing mean something in his vocational pursuits after he is thru with his course.

As a specialist the shorthand teacher is very often handicapped in his work. Too many students are put in his care. Students come to him who lack the common-school education or while taking the course carry other subjects which distract their attention too much from their shorthand work. It is my firm belief that shorthand, like surgery, dentistry, pharmacy, and law, must be specialized in and really ought not to be considered on the same basis as other school subjects. While the student is pursuing his shorthand course his attention should be entirely centered on three things; viz., shorthand, typewriting, and spelling, and the only attention given to English, if any is given at all, should

be in connection with his advanced course or dictation work where business English should merely be taught incidentally. Since shorthand is only another way of expressing language in written form, the student should understand the use and application of the common words. Thruout his theory course the speller and dictionary should be inseparable companions. Drills under the various principles and miscellaneous drills should comprise syllabication. Students should be able to group consonants, in the words, properly in longhand and then transpose these syllabicated forms into correct shorthand forms. There must be no hesitation in grouping consonants correctly in shorthand, applying the principles quickly, i.e., indicating simple, compound, and triple consonants, prefixes, and affixes, and in the correct positions, if a system of shorthand is being used which has position writing. The student should be drilled in reading the separate words apart from their use in sentences. He should first read the words vocalized or partly vocalized and then unvocalized.

Word signs, contractions, and phrases occurring thruout his course should be so thoroly memorized that they can be reproduced unhesitatingly. The student should be compelled to write every shorthand exercise and typewriting exercise a certain number of times with the greatest care and the teacher must not tolerate slovenly or careless practice work. No student should be permitted to take dictation on an exercise unless he has written it the required number of times.

There is no one tendency that is more characteristic of all shorthand students than the desire to rush into dictation practice before they are properly prepared for it. There is no more important subject to the pupil than dictation and none which is more abused. It is regarded by most students, and unfortunately by many teachers also, as the magic medium thru which good, bad, and indifferent shorthand writers will in some mysterious way become rapid and efficient stenographers.

Until the shorthand student is able to write any word in the vocabulary of an ordinary, well-educated man without exertion or hesitation he is not properly prepared for general dictation. This presupposes a real mastery of every principle in the system so that the principles required for the representation of any word can be formed into that word naturally and easily as the letters of the alphabet slip from the pen point in writing a word in longhand. To acquire speed in shorthand with legibility, without which speed avails nothing, the student should first make himself thoroly familiar with the shorthand system which he uses, mastering each principle thoroly before taking up the next. Always use the same outline for a word and be so familiar with it that there will be no hesitation in writing, for hesitation is the enemy of speed.

As a rule we find that the average shorthand student while trying to take dictation writes one or two simple words, that he has "had" before, easily and without hesitation; but the moment a somewhat unusual word is encountered his brow becomes wrinkled and knotted with an effort to bring together hazy and half-mastered principles, his pen or pencil is gripped with desperation, and after wasting enough time to have written a dozen words he evolves an outline, comes out of his trance, and makes a wild scramble after the words that have been accumulating during his struggle over a single outline. After writing a few more monosyllabic words with reasonable facility he repeats the spectacle just described and so on. What does all this mean? It shows that the student is not ready for general dictation; that he should return to his principles and master them, combining his review of the principles with copying practice, which should be closely supervised by the teacher. Thruout his theory course or when compelled to return to it from his dictation course, he should constantly bear in mind several distinct and definite ideals to improve his writing methods, which may be stated thus:

1. The cultivation of an extremely light touch.
2. Elimination of hesitation in the formation of the outlines and between outlines; in other words, smooth and instantaneous transition from one outline to the next.

3. The ability to grasp mentally and reduce to shorthand a string of from three to half a dozen words with a continuous impulse—just as continuous as if the words were actually connected together in a phrase. Other details should be taken up and specially studied from time to time, such as an erect position of the body at the table while writing, holding of the pen or pencil, etc. Thruout the theory course there must be close attention to and mastery of details or the superstructure will not stand.

We have heard much of the superior training which Germany has provided for almost every human vocation. We have already learned much from Germany and are constantly taking instruction from her master minds. In Germany as well as other European countries there is much for us to learn—but the one lesson that they most forcibly teach us is the lesson of thoroness. It is this factor that our own schools have grown to neglect, and to get back to this fundamental basis is just now our most perplexing problem.

The principal shortcomings of stenographers are: first, their modern "education"—they have heard of the nebular hypothesis and have been taught many of the popular fads of the day, but they do not know how to write English understandingly; second, ignorance of the principles of punctuation and capitalization; third, inability to spell common English business words; fourth, lack of knowledge of the geography of this or any other country—they cannot spell the names of the principal cities and do not know the names of the states in which they are situated; fifth, meager knowledge of the system of shorthand they pretend to write; sixth, lack of general information; seventh, failure to give intelligent attention to business.

There is a demand for competent stenographers; men and women of judgment, discretion, common-sense, and ability; men and women who can write good shorthand and who are able to read what they have written—not after the fashion of translating Egyptian hieroglyphics but with ease and dispatch. Stenographers who can pass high an examination along these lines do not complain of poor pay. "Those who never do any more than they are paid for are never paid for more than they do."

Many stenographers have developed into poor stenographers not from the lack of original ability but from the failure to place the mind in a receptive condition so that every detail of school instruction would be assimilated as a law. There can be no latitude of thought or practice on the part of the students when absorbing the principles of a shorthand system. The application of a principle never changes, even after years of experience. The shorthand writer who does not make outlines legible to another writer of the same system cannot hope to become a good stenographer. We often hear young people say, "What's the difference how my shorthand looks as long as I can read it?" But the fact is that such cannot read their shorthand. Deplorable blunders are made by young stenographers in transcribing conjunctions, articles, and prepositions, showing distinctly that they have not mastered the details of a certain phase of their shorthand system.

We cannot emphasize attention to details thruout the entire shorthand course too much, and most emphatically must it be emphasized when acquiring the principles of a shorthand system. Some practical illustrations may not be out of place to impress this more forcibly upon the minds of my hearers. The French attempted to build the Panama Canal but they failed, and why? The chief difference between what the French tried to do and what we Americans are doing is that our men have mastered the details of the work, while they went at the job in a sort of wholesale way without knowledge of, or care for, the little items which the whole success of the enterprise is based on. We began on the mosquitoes and other supposed insignificant things and by looking after them, "according to the perfect law of the Lord" we are winning out. The whole difference between the two attempts to do exactly the same thing is a mere matter of detail. So much for that.

When my dentist set a "gold inlay" in one of my back teeth a few days ago and

handed me a hand mirror to look at his work with, after I had expressed my admiration of his skill (for it was a most perfect job), he said: "Once I couldn't have done it. It has taken years of the most careful and patient practice on the thousand and one little things which must every one be perfectly done that enables me to merit your good words." It is all a matter of detail. And so much for this also.

Our present telephone system was not as perfect years ago as it is now. Some years past ten miles was about the limit for good results. Now you can talk a thousand miles as easy as turning your hand over. But it has taken an infinite deal of patient and persistent looking after what once seemed insignificant things to get such service. The whole difference between what we could do at the start and what we can do now is entirely a matter of detail. And that is that.

Considering these things, it occurred to my mind that attention to, and mastery of, details is the secret of all the wonderful progress that marks this day and age. It is the groundwork of modern scientific methods.

Edison, Morse, Bessemer, Pasteur, and all their tribe devoted their lives to attention to, and mastery of, details. And then things began to move, "according to the perfect law of the Lord."

The daily routine in the household, the office, the factory, and the thousand and one different occupations in life is made up of attention to, and mastery of, details. Let us train our students from the start to attention to, and mastery of, details if we do not wish to add some more failures to the hosts of those who have fallen by the wayside. This turning out every year, by the wholesale, of reckless scribblers who are doomed to certain failure should they attempt to enter the stenographic field is a most deplorable condition in our day and age. Young people regardless of their previous condition of servitude or otherwise are made to believe that if they learn shorthand in from six to nine months' time they will be in a position to amass fortunes by means of it. They are crowded into schools in large numbers and practically herded instead of being instructed and trained.

The ideal way of training stenographers is by the private individual method where a teacher trains from start to finish a limited number of students. It would be a blessing to the profession of stenography if a large number of private teachers who are conscientious in the admission of students to the shorthand course would engage in the work of training stenographers by this method.

We realize the importance of specialization in medicine, pharmacy, law, and other vocational pursuits, but have we come to the realization of the fact that shorthand must likewise be specialized in? The stenographer's profession is equally as important as that of the dentist, pharmacist, lawyer, and doctor. I do not strictly class as stenographers the hosts of pretenders at the art who crowd our typewriter offices, but those who know how and can do it.

If we wish to train competent stenographers we must begin to eliminate all the drawbacks to success from the very start, such as indisposition to follow implicitly the teacher's instructions, giddiness, laziness, slovenliness, and the hundred and one things that are tolerated in many schools at the beginning of the course and thruout, and which are the basis of failure; viz., the lack of attending to details.

B. SPECIALIZATION WITH EXPERT INSTRUCTION REQUISITE IN ORDER TO MEET THE NEEDS OF THE BUSINESS WORLD

SELBY A. MORAN, INSTRUCTOR IN SHORTHAND, ANN ARBOR HIGH SCHOOL, ANN ARBOR, MICH.

This subject is not of my choosing, but rather to my liking, as it affords me an opportunity to present some ideas which I believe deserve more attention than they usually receive.

What are the needs of the business world? Does it need human machines trained mainly to do some one particular thing, or does it need well-rounded men? Before we can

consider the subject intelligently we must answer this important question. Does it need both? I believe it does. Then it would seem that our subject should be discussed from this twofold standpoint. While I admit that the expert or specialist as well as the well-developed man is needed, I believe that in the matter of his preparation the training of the specialist is of such slight importance as compared with the development of the well-rounded man that the former may be considered as almost a negligible quantity. In this strenuous business age in which we live the world needs, more than all else, that we develop strong, forceful, honest men and women of big caliber, men who have a grip upon things and upon situations sufficient to enable them to step into the shoes of those who are passing off the stage of action. It needs men who are able to lead our march of progress to a point in advance of what their predecessors have done. It is true that for every great organizing genius in commerce, finance, manufacturing, sociology, education, statecraft, and religion, we must have an army of human machines well trained and willing to obey orders, to perform the vast volume of routine work in which specialists are indispensable, without whom the efforts of the leader in any line would be futile.

The question naturally arises, Why not train those especially fitted for the higher positions to do the constructive work and those suited only for the machine work to perform the routine task in the best and most efficient manner? That would seem an easy solution of the problem.

But who shall decide which individuals are to become the great captains of industry, what men or women are to take the lead in educational progress and pilot us safely thru our threatening conditions of social and political unrest, and who shall be the human machines and devote their whole lives to the daily routine in the service of these leaders? "Aye, there's the rub." Has a teacher, especially the teacher of shorthand, the right to say, if not in so many words, by the ideals which underlie his teaching, that this one should be prepared for the more exalted place while the nine hundred and ninety-nine are to be fitted only for the monotonous grind of daily routine year in and year out until the end?

Is not this latter preparation, however, the very thing, and in fact the only thing that many of our shorthand teachers are able to give their pupils? Is not this just what, ordinarily, would be implied by my subject as it appears in the announcement of this meeting? I desire to protest against such a condition of things and such ideals. First of all, the teacher of shorthand should fully realize that he is fitting men and women for two entirely distinct lines or kinds of life-work: developing men; making machines. If the teacher has in view only the idea of training specialists, he is almost certain in every case to produce a mere machine and nothing more. Where the idea is primarily to develop men, the training for the necessary special routine work, which is always of secondary importance, will in most cases take care of itself. Should we then make the development of specialists, or in other words, human machines, our primary aim? I think not.

There are two serious objections to our stopping at this point. Unless a teacher be an unusually skilled psychologist and an expert in understanding human nature—and very few of us are—he cannot make even an intelligent guess in the majority of cases as to which one or ones of his students will make great leaders and which ones are fitted only for routine work. I doubt if there is a teacher anywhere with extended experience who has not had many surprises along this line. Every teacher sooner or later discovers that many of his students whom he believed had brilliant careers before them have failed wretchedly. Others whom he had hesitated to recommend as being even poor machines have later on often forged to the front and become great leaders in their chosen fields.

In addition to the fact that we cannot forecast the future of our students sufficiently well to justify our attempting to decide "who is who," there is another and far more important matter to be considered. When we emphasize the need of specialization to the exclusion of higher ideals and as teachers strive to fit our pupils to meet merely the narrow,

technical requirements, we cannot obtain the best quality of work. This principle applies in a greater or less degree to teachers in every branch of learning, but pre-eminently to teachers of shorthand.

Do not think that I fail to appreciate the value of the most careful and expert training which it is possible for the well-equipped and scholarly teacher to give. I object only to the teacher who goes no farther than to impart high technical skill, because I feel sure he is making a serious mistake.

Why is it that there is today such a dearth of able men, men in the broad and comprehensive sense of the term, in every great field of human effort? It is because too many of us teachers are still trying to develop mere specialists or human machines rather than aiming primarily to develop men. This idea is confirmed by the recent statement of one of our leading educators. He says, "We are making a mistake by simply training our students to be clerks instead of training them to be leaders and executives."

How may the teacher remedy this? By making every possible effort on every possible occasion to fire his students with this idea of Andrew Carnegie, who says, "Be a king in your dreams." We should, however, keep before our students all of the time the vitally important idea that to rise to the higher positions, to succeed to leadership, always requires the most careful and painstaking training in small as well as in large things. When once you get a student fired with an ambition for something really worth while, your trouble about getting him to devote the necessary time and effort to become an expert in his particular line will immediately vanish. What is more, the work of the student with such an ambition will always be infinitely better in every detail of the training than it would be if he were looking forward only to a clerical position. This has been illustrated times without number in my own experience. I believe it is the experience of every teacher who has made a real effort to fire each of his pupils with the ambition to "be a king," if only in his dreams.

I admit it is true that the very large majority of our students will never be able to realize such an ambition. That is not especially to be regretted. In fact, very few if any of us ever fully realize our dreams or ideals. But are we not all the better for having dreamed of great things for ourselves? We have all risen higher than otherwise we should ever have done. The teacher, however, should never forget that a fountain never rises above its source. No man ever rises above his ideals. Everyone will admit, however, that the higher one's ideals the higher he is sure to rise, whether he ever attains to them or not. Let me repeat that I firmly believe in the great need of the most careful training in details by skilled teachers, but I believe that that part of the teacher's work will take care of itself just in proportion as the teacher is able to enthuse his pupils with an ambition to be something really worth while. The teacher should not fail for an instant to keep constantly before the minds of his pupils the vital fact that success in the higher things depends very largely upon the most careful and painstaking training to do routine or machine work; that this is true not only while acquiring skill in doing a thing but also later on while practicing his art. This is the foundation upon which one must build before he can hope to reach the higher things to which his ambition calls him.

But you have no doubt all heard it urged that to fire one with an ambition for something which is beyond him is almost sure to result, when he fails to reach it, in his becoming discouraged and pessimistic and dissatisfied with life. I do not believe this is true, for if it were, we should all be pessimists and I know we are not. The young man or woman should, if possible, be made to realize that it is not necessarily failure if he does not reach his ideals. He may and often will reach something else which is quite as well worth while. In fact, there is a great deal even in the routine work of life which really has much of inspiration in it, if one can only see it in the right way. This is well illustrated by the action of a superintendent of construction of a great cathedral. He had noticed that the stone-cutters on a certain part of the work were indifferent and seemingly rather careless. He called the men into his office asking each to bring with him the drawing for

the particular task he had in hand. Then showing them a beautiful drawing of the front elevation of a magnificent cathedral with an imposing and beautiful arch over the main entrance, he asked each one to find in that grand arch the particular stone upon which he was at work in the dingy yard. The result was that each one immediately gained a new vision of the work he was doing and the importance of it. Immediately each workman realized, as he had not been able to realize before, that his individual work as well as that of the great architect was necessary to the success and completeness of that vast and perfect whole, and when he returned to his task it was with a new spirit and greater determination to make his particular contribution worthy of the exalted place it was to occupy. The teacher may easily fortify his pupils against possible discouragement by making it plain to them that, even tho it should become their fate to do machine work all thru life, such work is all-important to the success of some great undertaking of which each one is to be a part. The men who are at the head of the two-billion-dollar Steel Trust are by no means the only important men in that great corporation. The humble stenographer and for that matter every man from the day laborer to the president has his important place to fill, and without each one's place being filled regularly and promptly and efficiently, the whole organization would be weakened.

First get your pupils to want to be something worth while and then they will be perfectly willing to do whatever you require in the way of learning shorthand principles thoroly; taking dictation patiently until they can write rapidly and correctly; reading their shorthand exercises over and over again until they can read them like print, and doing everything possible to enable them to increase their vocabulary both of English words and of correct shorthand outlines.

There are a dozen good methods by which one may successfully learn the principles of his system. One will be suitable to one teacher and prove a failure in the hands of another. There are many ways by which pupils may master their wordsigns. One may be well adapted to one teacher, while another will utterly fail in attempting to use it. There is more than one good method of working up speed in shorthand and typewriting. There are different and equally commendable methods for becoming skilled in business English. There are various methods by which one may learn to read shorthand with ease. There are several good methods for increasing one's usable list of shorthand outlines for words and phrases. There are numerous good methods for becoming proficient in all the details of the stenographer's duties. But none of them can be made to succeed in the most complete way, no matter how skilled the teacher, no matter how perfect the method, nor how great the native ability of the pupil, unless the teacher is able to appeal to the best that there is in the pupil, to move him to long for higher things than the work of a mere human machine. On the other hand, the teacher may be poor, his methods not the best, and his pupils of very ordinary ability; but if he can in some way enable his students to catch a vision of the possibilities that are within the reach of every man or woman, willing to aim high and *work*, their success in the best sense is sure to be much greater than that of those whom fortune may favor in every other conceivable way. Abraham Lincoln, Booker T. Washington, Dwight L. Moody, in many ways three of the great men in the world's history, had but little schooling and very poor schooling; but somebody touched their lives; somebody guided their thoughts to higher things. Naturally their lives and their great achievements followed as day follows the night. Who are to be the great leaders in the various fields of human effort? Are they to be men sent out as human machines, by skilled teachers who think only of developing technical experts as a machinist constructs a fine watch, and nothing more? Unfortunately our modern education is drifting too much in the direction of machine-made men and women. The inevitable result is that the leaders of the future will continue to be men who have been inspired by the few teachers of this higher order, often from schools of small repute, to make the most of themselves and their opportunities. This human touch, this disposition and ability to inspire, is a thing, strange to say, all too infrequently

found in our so-called best schools. Technique without inspiration is barren. Inspiration without technique will, in most cases, see to it that the latter is acquired and this lucky combination is what produces the men who move the world. With inspiration it is easy for the teacher to secure the hearty co-operation of his pupils, to make them willing to be governed by his advice in preparing to do the machine work so essential to the greatest success, to have the right attitude toward their employers and not to think only of today, the quitting hour, and the pay envelope. Inspiration is what develops initiative, which is vitally essential to real success in every kind of leadership.

When teachers realize the vital importance of giving their students a vision in life, they will not be nearly so likely to make the serious mistake of producing mere clerks, fit only for routine work, out of those capable and worthy of better things. Then there will be a far greater number of men and women prepared to meet the insistent demands of our times for men and women with large ideas and high ideals. Then there will be plenty of men prepared to meet the most numerous and the most urgent calls that have ever been made in the world's history for men of character and real efficiency.

INTERCOMMUNICATION BUSINESS PRACTICE

OLIVER D. FREDERICK, TULEY HIGH SCHOOL, CHICAGO, ILL.

For one I am disappointed that the paper on this subject was unavoidably omitted from the program of this section. It is a phase of training in bookkeeping in which I am interested and the importance of which I should like to have emphasized. It is embarrassing to attempt a discussion of it before an audience that has been listening to such carefully prepared papers and it is equally impossible to do the subject justice without careful preparation. It is with the hope that others will add to what I say that I undertake it at all.

From an investigation made some time ago it is evident that bookkeeping material of this form is not used by high schools as extensively as its merits deserve. From the same source of information it appears that this condition of affairs is largely due to two causes. In the first place teachers do not seem to have had time and opportunity to become acquainted with courses of this character, and in addition to this many teachers who appreciate the practical and the educational value of this form of business practice are deterred from using it thru fear of failure because of apparent obstacles that present themselves.

An informal discussion is always more or less lacking in continuity and some important points are likely to be omitted, but it is my hope that at least some of the merits of the work under consideration will be brought to the attention of those present. I shall not undertake to give in detail the features a set of transactions should possess in order to be suited to this kind of work. But care must be exercised or they will be too cumbersome to yield the best results. The entire plan of the work must be sufficiently elastic to meet the various contingencies for which provision must be made.

At the very beginning of such a course the pupil meets with a new experience. The transactions originate and come to him as they do to the office worker. Immediately he becomes conscious of his power to influence the trend of the business and also of his responsibility in directing it wisely. What he must do no longer comes to him in the formal statements of the textbooks or the studied language of the teacher.

He realizes that the incoming business forms have been prepared especially for him by persons whom he has probably never seen, yet whose instructions he must interpret and follow. In return he prepares other forms and issues other instructions, upon the correctness and exactness of which others must rely in carrying out his wishes. In each step of his work he recognizes the existence of a real individual to whom he is under obligation to perform his part of the transactions correctly.

It is this strong personal element that enters into almost every act of the pupil that renders this form of business practice so superior to anything that has thus far been suggested to take its place. A form of business practice in which pupils of a class carry on business with each other has been very highly recommended because of this same feature, but it should be observed that the relation existing between the parties to transactions in this form of work differs very materially from that under discussion. The fact that pupils of a class come into daily contact with each other removes a powerful incentive for exactness, because there is always the opportunity for oral explanations if definiteness in the written instructions is lacking. It is also a well-established truth that pupils do not have the same respect for the opinions and criticisms of their classmates as they do for those of others of equal attainments.

Nothing can be better suited to test a pupil's ability to do practical bookkeeping and look after the other details of office work. Nowhere are the conditions under which he works so similar to what he will meet after he leaves school. It may be humiliating to some of us to question whether a particular form of training prepares the learner to profit financially from his efforts. But the fact remains that many of the pupils in the commercial departments of our high schools have selected this work because they hope to make use of their training in earning a living. It is a part of the teacher's business to discover how well those under his care are equipped for their work and to provide the material and the form of instruction best fitted to make them efficient.

It is conceded that this is not the proper material thru which to acquire proficiency in the theory of bookkeeping, but having obtained a thoro grounding in the principles of the science this work offers a splendid means of applying this knowledge to the problems that arise in business. Experience and observation have given me a very high respect for its cultural value, but aside from this or any other purely educational consideration, I believe it justifiable to devote a limited time to this kind of business practice because of the excellent test of the pupil's efficiency it provides to both the teacher and the pupil.

In recent years educators as well as laymen have voiced repeated admonitions to make school work, especially the so-called vocational courses, more effectively practical. Bookkeeping, altho it possesses in a high degree the time-honored educational virtues, is pre-eminently a vocational subject; and we as teachers are remiss in our duty if we fail to present the subject in a thoroly practical manner, and to test our pupils' efficiency before they enter the business world. I, for one, recommend intercommunication business practice as an aid to both these ends.

DEPARTMENT OF CHILD HYGIENE

SECRETARY'S MINUTES

OFFICERS

President—WILLIAM H. BURNHAM, professor of pedagogy, Clark University.....Worcester, Mass.
Vice-President—WILLIAM C. BAGLEY, School of Education, University of Illinois.....Urbana, Ill.
Secretary—THEDA GILDEMEISTER, supervisor of training, Normal School.....Winona, Minn.

FIRST SESSION—MONDAY FORENOON, JULY 8, 1912

The meeting of the Department of Child Hygiene was called to order at 10:00 A.M. by the president, William H. Burnham, professor in Clark University, Worcester, Mass.

A paper on "The Problems of Child Hygiene, and the Contribution of Hygiene to Education" was presented by President Burnham.

This was followed by a paper on "The Hygiene of Rural Schools" by Fletcher B. Dresslar, specialist in school hygiene, United States Bureau of Education, Washington, D.C.

Arnold L. Gesell, assistant professor of education, Yale University, New Haven, Conn., who was to present a paper on "Child Hygiene in the Primary Grades" was absent; consequently Frank G. Bruner, assistant director of the Department of Child Study, public schools, Chicago, Ill., was obliged to omit the discussion of this paper as appointed.

On request of the president, Dr. Bruner read a paper on "The Testing of Children for Mental Efficiency."

The following Committee on Nominations was appointed by the chair:

Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind.
Daniel P. MacMillan, director of Department of Child Study and Pedagogical Investigation, public schools, Chicago, Ill.
Nebraska Cropsey, assistant superintendent of schools, Indianapolis, Ind.

After a general discussion, the meeting adjourned.

SECOND SESSION, ROUND TABLE—WEDNESDAY FORENOON, JULY 10, 1912

The Department met in round-table conference and was called to order at 9:30 A.M., by the president.

The topic, "How Far Are Teachers Responsible for the Morbidity and Mortality of School Children?" was discussed in papers presented by the following: W. A. Evans, M.D., Northwestern University, Evanston, Ill.; Isaac A. Abt, M.D., Chicago, Ill., and Hyman Cohen, M.D., assistant chief of Bureau of Medical Inspection, Chicago, Ill.

A general discussion followed the reading of these papers.

The meeting then adjourned.

THIRD SESSION—THURSDAY FORENOON, JULY 11, 1912

The meeting was called to order by the president at 9:45 A.M. in the Red Room of the La Salle Hotel, Chicago.

Edwin O. Jordan, professor of bacteriology, University of Chicago, Chicago, Ill., presented a paper on "School Diseases."

Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind., who was on Wednesday's program in the round-table discussion, having been detained on other official business on that day, was then introduced as the next speaker. His paper was under the general topic of Wednesday's conference, "How Far Are Teachers Responsible for the Morbidity and Mortality of School Children?"

A general discussion followed the reading of this paper.

A paper on "Child Hygiene in the Bureau of Education" was next read by Philander P. Claxton, United States commissioner of education, Washington, D.C.

After introductory remarks, Dr. Claxton asked the privilege of calling upon Fletcher B. Dresslar, specialist in school hygiene, United States Bureau of Education, Washington, D.C., to speak on this subject. After this speaker, Dr. Claxton continued his paper.

William C. Bagley, professor of education, University of Illinois, Urbana, Ill., opened the discussion on this paper, which was continued by Daniel P. MacMillan, director of the Department of Child Study, public schools, Chicago, Ill.

A paper on "Stoop Shoulders and Flat Chest in School Children" was then presented by Charles A. L. Reed, M.D., professor in the University of Cincinnati, Cincinnati, Ohio.

A general discussion followed the reading of this paper.

The Committee on Nominations presented the following report:

For *President*—W. A. Jessup, dean, School of Education, University of Indiana, Bloomington, Ind.

For *Vice-President*—F. B. Dresslar, specialist in school hygiene, United States Bureau of Education, Washington, D.C.

For *Secretary*—Mabel Williams, University of Iowa, Iowa City, Iowa.

Following the reading of the report, it was moved and carried that the report be accepted, after which the secretary was instructed to cast the ballot, and these officers were declared elected for the ensuing year.

The president then announced that an informal reception would be held at the Chicago Women's Club, Fine Arts Building, at 4:30 P.M. to afford an opportunity for members of the National Education Association who had not met Ella Flagg Young, superintendent of schools, Chicago, Ill., to do so.

The meeting then adjourned.

LUELLA V. LITTLE, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE PROBLEMS OF CHILD HYGIENE, AND THE CONTRIBUTION OF HYGIENE TO EDUCATION

WILLIAM H. BURNHAM, PROFESSOR OF PEDAGOGY AND SCHOOL HYGIENE, CLARK UNIVERSITY, WORCESTER, MASS.

I do not know the reason for the change in the name of this department from that of Child Study to Child Hygiene unless it was that so much of the work in child study and so much of the interest of the workers now center upon problems of child hygiene. I was not present at the San Francisco meeting, and the records are meager.

I am sure, however, that the aim was not to minimize the importance of the scientific study of children. All child study is significant for hygiene; and child hygiene covers an important part of child study.

It is fitting, as I trust you will agree, that there should be formal recognition of child hygiene in the National Education Association. The general and departmental programs this year bear evidence to the interest in the subject. Next year the International Congress of School Hygiene is to meet in this country, holding its sessions in Buffalo in August. The importance of the subject I need not emphasize at length. Your interest in it is proved by your presence; but I will beg you to notice a few of the contributions of hygiene to pedagogy and some of the problems that this department may well investigate.

It is customary for the presiding officer of each department of the National Education Association to give an address. I have chosen for my subject "The Problems of Child Hygiene, and the Contribution of Hygiene to Education."

The first contribution to which I would call attention is the evidence of the vital relations of hygiene and education. Let me illustrate somewhat in detail some of the wider of these relations and the need of recording them.

School laws, for example, for the spread and improvement of popular education, altho framed with the best intentions in the world, are liable to cause grave harm unless regard is had also to the principles of social hygiene! For illustration, let us consider for a few minutes the experience of England.

As people in England in the last century began to feel the necessity of popular education and the evils of child labor, certain important legislation occurred. From 1864 to 1867 there were a series of acts of Parliament applying to the iron, steel, and copper industries, and finally the Workshop Regulation Act of 1867, which forbade the employment of children under eight years of age and from eight to thirteen except as half-timers. In 1870 the Foster Act was passed which provided for the formation of board schools where necessary, and in 1877 the Compulsory Education Act was passed. Again in 1887, the Mines Act was passed, and in 1899 an Education Act which forbade the employment of children under twelve in any way to interfere with attendance at school.

Each of these acts was passed of course with the best of motives, for the sake of protecting the children and of fostering popular education. What was the result? After each one of them, in the localities especially affected by the factory laws, the birth-rate went down. This was true in the mining districts of Cornwall after the Act of 1867; it was true in the factory towns of Bradford, Bolton, and Leeds after the Compulsory Education Act of 1878, and in general thruout the country after the Factory Act of 1891, and I think also after the Education Act in 1899.

Why did these results follow from such apparently excellent laws? The investigations by Karl Pearson and his associates have apparently shown the reason. As a result of such legislation the children could no longer add to the family income. The economic value of the child was destroyed. The father was handicapped as against the childless—the mother was handicapped as against the childless.

These studies indicate that whenever legislation takes away the economic value of children to their parents, the supply of children diminishes.

The direct significance of this for hygiene is shown by another fact observed by Karl Pearson. For some reason in England apparently the first-born and second-born of a family are of less stable constitution; and the neurotic, the tuberculous, and the insane are more frequent among the elder born. This means that if you decrease the size of families you increase the proportion of the physically and mentally unsound in the community.

At the same time that England thus handicapped the fathers and the mothers of the fit, it took care of the children of the paupers and criminals. Of this Karl Pearson says:

> I do not speak lightly; there is very definite evidence to show that the terrible fall in our birth-rate since 1878 has been a differential fall. It is a fall which concerns chiefly the fitter members of all classes. The fitter of all classes, from the artisan to the executive, have fewer and fewer children, but the unfit maintain their old numbers; nor is the reason hard to seek—income and wages are no longer proportioned to physical or mental fitness. The man and woman who cannot afford to marry are now taxed for the education, the sanitation, the medical provision, and very often the nutrition of the offspring of those who ought not to marry. The policy of bettering the environment has been carried out regardless of the fact that it has checked the reproduction of the essentially abler and more desirable members of the community. Our ignorance of the relative intensity of nature and nurture has led us in political and philanthropic action to disregard nature in the belief that improved nurture must involve steady racial progress. If the view I have attempted to put before you be a correct view, then we have spent our energies on grindstone and oilstone, when the first need was good steel. [*Nature and Nurture*, pp. 27–28].

I am well aware that some of you maintain that the checking of the birth-rate is a good thing. Others may exclaim, as I do, against the evils of child labor. Others will perhaps point out that conditions in this country are different. Very good; but all this is aside from my point, which is merely to illustrate how the best meant legislation that ignores hygiene may have quite different results from those intended. The essential facts, to sum them up in few words, are these:

England, by her legislation, took away the economic value of the child without compensation. She thus handicapped the parent as compared with the childless. This decreased the number of children in a family and increased the proportion of the diseased and defective. At the same time, she provided for the children of the pauper and diseased classes, and thus put a premium upon the production of the unfit. I use this merely as an illustration.

The first contribution of hygiene, then, is to show that if we are to have good raw material for the processes of education, we must have regard to the laws of biology and social hygiene, and that even the noblest aims of a pedagogy that ignores hygiene may be dangerous. The first problem is, How can we put a premium on the production of healthy children and avoid in all our educational and philanthropic efforts putting a penalty upon the parentage of the fit?

The second contribution is to show the significance to education of the hygiene of infancy. The second problem is how to save the 20 per cent to 30 per cent of children that die in the early years, and how to avoid tuberculosis, rickets, and the like, that cause so large a part of the so-called school diseases later.

A very significant example of the relation between school hygiene and child hygiene in the broader sense is furnished by recent studies of rickets and scoliosis. Rickets is a disease that falls usually between perhaps the eighth and twentieth months of infancy. The discussion of this disease is not likely to be included in the books on school hygiene. It is not supposed that teachers are concerned with it, but it is especially significant in its relation to the health of the school child, and scoliosis, which has erroneously been supposed to be especially a school disorder, cannot be understood without knowledge of the facts concerning this disease of infancy.

It is said by many authors of textbooks on school hygiene that scoliosis is specifically a school disease, but recent studies indicate that in 50 per cent of the cases scoliosis is caused by rickets; that in 15 per cent it is caused by certain innate abnormalities; and that of the remainder 35 per cent many cases are due to various causes, so that only a small minority remain which can be due to the conditions of school life, and here apparently it is only the cases of functional total scoliosis that can be traced to the school.

Without the study of the wider subject of child hygiene and such diseases of infancy as rickets and the like, school hygiene is not likely to be rightly understood and grave errors are likely to be made. We are devoting much attention to corrective gymnastics and the like; but if we would prevent scoliosis we must go back and provide for the hygiene of infancy.

The third contribution of hygiene is to show that the primary aim in the early years of the kindergarten and primary school should be health and normal development, and the emphasis placed upon developing the basal structures and fundamental nerve centers, and the habits of health that shall be a defense during the later years.

Let us recall certain facts and look them squarely in the face. First of all, there is widespread dissatisfaction with our present school system. Both parents and teachers are very largely dissatisfied. Parents point to the small amount of useful knowledge that pupils bring away from the school, and they point to the injury to the health that frequently occurs, and raise the query whether the reward of this modicum of knowledge is worth the sacrifice that is made. Teachers, on the other hand, especially in the higher grades, complain that children have small desire and little ability for work—they cannot do anything difficult; they lack stamina and efficiency. Usually they lay the blame on instruction in preceding grades or on lack of training in the home. With all this we are not directly concerned; but the fact of the widespread dissatisfaction, among both teachers and pupils, cannot be ignored.

Now the causes of all this are a long story which cannot be told here, but one feature of it we are concerned with. It may be put briefly as follows: If children are to do the work that the school requires satisfactorily, they need better health, clearer minds, and more desire to work. Not only is there enormous waste because of the absence from school on account of illness, and in the school on account of bad methods, but a large part of the children are handicapped by disease or physical defects. They need a better foundation of physical health and development. The point to be emphasized here is that they need this for pedagogic success.

From the point of view of hygiene, the whole aim of education in the early years should be modified and the emphasis placed primarily on health and normal development. This is emphasized both from the point of view of hygiene and from that of pedagogy. Hygiene shows the vital importance of normal development in these early years and protection from disease. Pedagogy, on the other hand, shows how little in the way of formal training is likely to be received and how wasteful is the process of instruction likely to be in these years, and that the net increment of knowledge is very small.

Fourth, hygiene has shown the tremendous significance of the development at the adolescent years, and the importance of this period for health and education. Here a whole group of problems is presented—problems in regard to the emotional life and sex hygiene, as well as problems of general, somatic, and mental health. It would be the gravest mistake to suppose that these questions are already settled. Here many more investigations are needed and only in a general way does hygiene now point out the pathway of normal education. This general contribution is to emphasize the need of training as compared with mere instruction, training in healthful interests of manifold character, and in habits of health, both physical and mental.

Fifth, studies of modern hygiene have shown that the most efficient school work must have regard for the optimum conditions of brain activity, that education must be adapted to the stages of physiological and psychological development, that regard must be had for the fundamental psychological laws of learning and retention and the proper alternation of periods of work and rest, and that haste and premature and unrelated development are liable not only to do great injury to health, but to defeat the very ends of education. Here again a whole group of problems in regard to the best periods of study and the best conditions for brain work, and the like, are presented.

Strangely enough, the opinion seems to prevail in some quarters that in some way hygiene is in conflict with pedagogy. Many years ago in Germany, when Kraepelin uttered his oft-quoted words to the effect that the inattention of children is their salvation and uninteresting teachers a hygienic necessity, forthwith there was a hue and cry from the teachers as if in some way pedagogy had been attacked by hygiene. There is no sort

of conflict between the demands of the two sciences, or the two arts, if you please. Hygiene, in fact, is an essential condition of efficient pedagogy, and the only way children will be able to meet the growing demands of the modern curriculum effectively is by regard for the laws of the hygiene of development in general, and the hygiene of the nervous system as regards work and rest, and mental hygiene as regards the training to habits of attention and orderly association. We boast of our schools, but many of their graduates have to be re-educated in the sanitarium or the hospital.

Sixth, are all the problems of the child's school environment—including the hygiene of the schoolhouse and the playground—the problems that our Bureau of Education has begun to study so auspiciously.

Seventh, one more fundamental problem is presented of a practical nature. Nowhere perhaps more than in hygiene is there such a gulf between our knowledge and our practice, between knowing and doing. Systems of medical inspection that do not inspect, the best systems of ventilation that do not ventilate, adjustable seats that are not adjusted, the best playgrounds that are not used, the best conditions for work and study which are not regarded, are of little value. Hence we have the great practical problem of how to bring about the actual practice of hygiene in the schools.

Probably we must struggle with this practical problem for a long time. We are yet far from settling the many practical questions involved here. Hygiene does, however, emphasize a few general points. First, it is important that teachers should receive adequate instruction and training in modern child hygiene. Second, it is necessary that the emphasis in all our hygienic education should be placed upon training, the actual practice of hygiene, rather than upon mere instruction, and as a means of bringing about such training, a special organization, a militia of hygiene, if you please, may well be established.

A few weeks ago it was my privilege to witness the parade of the high-school cadets in the city of Boston, a parade of two or three thousand school boys. It was an excellent exhibition of the results of careful drill and organization. The cadets did credit to themselves and to their military instructors. But as I observed them as they marched, I noticed how many were sallow in countenance, anæmic, or flat chested, or mouth breathers, or apparently suffering from some physical disorder or defect or bad condition; and how few had the ruddy glow and the general aspect of health that the adolescent should exhibit. These were, however, in a certain sense, the pick of the pupils in the public schools.

If this is the price that must be paid for education, it is no wonder that parents are dissatisfied and that they ask whether the reward is worth the sacrifice. What man of sense would bargain vigorous health, normal development, and a few motor accomplishments like those of the Boy Scouts for a little conventional book-knowledge and anæmia and ill health and mal-development?

Why should not the health training which is now so large a part of the military training in the regular army be emphasized in the training of high-school cadets? Instead of special drill in military tactics, why not let the emphasis be placed on drill in the habits of health, and gradually change the high-school cadets from a purely military organization, omitting the formal technique of an organization which in the near future is likely to be little more than a general police force, to a militia of health trained to fight the conditions of disease by the methods of modern science?

Such are some of the larger aspects of school hygiene and such the relation of hygiene to pedagogy. The time is long past when education could ignore hygiene. The time has come when we need a better perspective and a clearer view of the essentials in education.

The problems outlined in this general way are, I am convinced, the subjects which this department should carefully investigate. Each one of these great topics includes a score of more concrete problems. In each a large collection of facts and careful study are needed. The general points may be summed up briefly as follows:

1. How in all educational and philanthropic legislation to put a premium upon the production of healthy children.

2. How to protect infancy so that we may save the lives of the healthy children that are born and how to protect them from contagious diseases, rickets, and the like, so that when they come to the period of school life they may not be the inevitable candidates for the so-called school diseases.

3. How in the early years of school life so to place the emphasis upon hygiene that, by co-operation with the home, normal development may be insured, the foundation laid for future health, and the children saved from the common school defects, defective sense organs, decaying teeth, deformed jaws, defective speech organs, adenoids, and the rest.

4. How at the period of adolescence to develop such healthful interests and such habits of healthful activity that the youth may be saved from emotional neurosis, social evils, and the like, and both morals and health be insured.

5. How in all grades to develop such habits of work and rest, of attention and orderly association, and such normal habits and interests in general, that the graduates of the school may no longer become candidates for the hospital but develop into normal healthy workers.

6. How to provide a sanitary school environment.

7. Finally, how to bridge the gap between knowing and doing so that our hygienic knowledge may be utilized everywhere and every school graduate become a teacher and a soldier in the army of health.

Such are the great problems with which we have to deal. They are fundamental to education. We talk of education for citizenship, education for life, education for efficiency and for character, but if we ignore the laws

of biology and of social hygiene, if we penalize the parentage of the fit, with the best possible education the race will degenerate. If we disregard the hygiene of infancy, an enormous percentage of the best children born will die, and a large percentage will survive as candidates for scoliosis, tuberculosis, and imbecility. If hygiene be not emphasized in the early years of the kindergarten and primary grades, then the long list of physical defects, adenoids, decayed teeth, deformed jaws, and the like, will continue. If our youth at adolescence are not morally and hygienically trained, social vice will remain with us. If the conditions of efficient brain activity and the principles of mental hygiene are not regarded thruout the whole system of education, and if positive habits of healthful activity are not formed, public education will remain unsatisfactory, and the product be inefficient, unreliable, and continue to furnish candidates for the sanitarium and hospital for the insane; and, finally, unless we can devise methods of transforming our hygienic knowledge into hygienic doings, our science will remain futile.

THE HYGIENE OF RURAL SCHOOLS

FLETCHER B. DRESSLAR, SPECIALIST IN SCHOOL HYGIENE, UNITED STATES BUREAU OF EDUCATION, WASHINGTON, D.C.

I wish to present at this time some facts obtained by an investigation into the hygienic conditions of typical rural schoolhouses in nineteen states, and to comment briefly on these facts. But before presenting the results, it will be well to indicate the method used in getting the facts: I sought and obtained the co-operation of the state superintendents of these states, and asked each to select two counties of his state which would be typical, progressive counties. I then secured the addresses of the teachers of the rural schools in these counties and sent each one the following personally directed letter, and list of questions to answer:

The United States Bureau of Education is very desirous of getting reliable and up-to-date information concerning the hygienic condition of typical country schools and asks your co-operation in the work. Two counties in your state have been designated by your state superintendent, from which this material is to be gathered.

Please fill the inclosed question-form as carefully as you can and return it in the envelope inclosed, which requires no postage. Get one or two of your larger boys or girls to help you to do the measuring and calculation required. They will enjoy it and it will do them more good than an ordinary lesson in arithmetic. Make your answers as clear as you can, yet short. If you have a photograph of your building, or can get one, it would help us very much if you would send us a copy. The Bureau is planning to publish a bulletin on country schoolhouses, and is hunting for all the good features available. If you desire it, a copy of the bulletin will be sent to you when it is ready.

Please answer the questions fully, whether your conditions are good or bad. No individual answers will be published, and neither praise nor blame will appear charged to any persons or locality. We simply want the facts as they are and we trust that you will help us immediately.

.....1912

SURVEY OF THE HYGIENIC CONDITION OF RURAL SCHOOL, ...

DISTRICT NO....., COUNTY OF....., STATE.....,

SURVEY MADE BY....., TEACHER.

School grounds: Length, ...feet; width,.....feet.

Size of playground,.....square feet; space for garden or agricultural work,.....square feet.

Ground: Level?.....; rough or hilly?.....; well-drained?.....; trees?.....

Building: Wood?.....; brick?.....; cement?.....; stone?.....; new?.....; old?.....

Size of schoolroom: Length,.....feet; width,.....feet.

Light from one side?.....; two sides?.....; three sides?.....; four sides?..... Toward what direction do the windows face? east?.....; west?.....; north?.....; south?.....

From what sides do your pupils get light? Left?.....; right?.....; rear?.....; front?.....

What is the total area of all the windows?.....square feet.

Floors: single thickness?.....; double?.....

Blackboard: Area,.....square feet; where placed?.....; height from floor,.....feet; of what material?.....

Are the desks single?.....; double?.....; adjustable?.....; sufficient in number?.....

Have you window shades?.....; what color?.....; do they run up from the bottom, or down from the top?.....

What is the color of the schoolroom walls?.....

Have you cloakrooms? One?.....; two?.....; none?.....

Briefly describe any special means you employ to secure ventilation .....

.....

.....

.....

Have you tested the eyesight of your pupils?.....; if so, by what method?.....

Have you tested their hearing?.....; if so, by what method?.....

.....

What is your water supply? From well on school grounds?.....

From spring?.....; how far distant?.....

From neighbor's well?.....; how far distant?.....

Do you consider water pure?..... Are you furnished drinking-fountain?.....; individual cups?.....; one or two cups for all?.....

How do you heat your schoolroom? Common stove?.....; jacketed stove?.....; where located?.....; do you burn wood or coal?.....

Do you have special janitor service?.....

Do you use dry sweeping?.....; sprinkle floor with water?.....; scatter damp sawdust on floor before sweeping?.....; use any prepared dust-gathering material?.....

.....; are your floors oiled?.....; do you use a feather duster, or dust cloth to keep the furniture clean?.....

.....

Do you have a thermometer?.....; what temperature do you strive to maintain in your schoolroom?.....

At what hour do you begin school in the morning?.....; at what time do you dismiss for the day?.....; how much time do you give for recess in the morning?.....; afternoon?.....

Toilets: One?.....; two?.....; none?.....; are they protected against flies?.....; are they made with deep excavations?.....; no excavations?.....; septic tank disposal?.....; washout system?.....; how far are they from the well, if you have one?.....

Do you do any of your regular school work out of doors during pleasant weather?.....

.....

.....

Do you have medical inspection of your school children?.....

If so, how is it managed?.....

.....

.....

.....

Has any provision been made in your county or township for the care of the teeth of school children?..... If so, describe it.....

.....

.....

Do you wish a copy of the bulletin on country schoolhouses when completed?.....

I preferred to send these questions to the teachers instead of to the county superintendents, for two reasons: First, the questions required more specific and definite facts for their answers than a county superintendent could ordinarily command. Second, it was hoped that thru these questions many suggestions would be lodged in the minds of the teachers, and that thereby some good might be accomplished in addition to getting the facts.

In all, 3,300 letters and lists were sent out, and about 50 per cent of all these were filled out and returned. The results I here present were tabulated from 1,292 returns representative of the 19 states. Lack of time prevented a complete tabulation of all the returns received. But the relative results would vary but little had I been able to finish the work.

It will be impossible for me, within the time at my disposal, to present all the facts brought out in this investigation, and so I have selected just a few of the more important ones to present for your consideration.

In all, we have examined 1,296 returns. Naturally, some of the teachers did not answer all the questions propounded, and hence the figures for each topic will vary slightly in accordance with this neglect.

Out of 1,244 returns giving figures regarding the area of school grounds, 727 had less than one acre, and nearly half of this number, or 321, had only a half-acre or less. Only 124 of all these schools were furnished with grounds equal to two acres or greater in extent. It seems practically useless to say a great deal at this point concerning this phase of rural-school development, and yet I cannot forbear to say that all this cry concerning agricultural education and the adaptation of rural schools to rural life will amount to very little unless our rural schools are furnished

more ground for such work, as well as for larger playgrounds and all those amenities which will appeal to the heart and life of school children. It seems foolish to expect any sort of worthy teaching of agriculture to emerge from our district schools when they are so conditioned.

Turning to the character of the ground, as represented by the returns, it seems that of the 1,283 answers, 1,030 rural schools of this group have comparatively level land, while 253 are situated on hilly, rough land. About the same proportion of the school grounds, or 1,134, are reported as well drained and 234 are wet and undrained. Nine hundred and thirty (930) say they have one or more trees on their school lots, while 340 report no trees at all. I am not able to say whether these trees are natural forest trees, or whether, for the most part, they have been planted. Yet I cannot help feeling, from the general tenor of the reports, that where many trees are found on school lots, they are natural forest trees which had been left standing when the schoolhouses were located. However, as I say, no definite conclusion on this point can be reached.

In connection with the size of the school grounds and the general nature of the school lots, it will be well to say that the measurements were taken in feet and these have been reduced to acres in making the tabulation. The reason for asking for returns in feet was to forestall any wild guessing as to the size of the school lots. It also should be remembered that the size of the school lot includes the ground upon which the building is situated as well as that about the building.

In order to get some composite notion of what a rural school is at this date, the letter called for returns on the material of which the buildings were made. Eleven hundred and thirty-four (1,134) were reported as wooden buildings, 110 as brick, 37 stone, and 7 cement. Of these, 464 were listed as new buildings, while 805 were tabulated as old. I wish to call attention here to an important consideration: more than 63 per cent of the buildings included in this survey are old, and a little less than 37 per cent are new. But "new buildings" does not in any sense of the word mean buildings constructed according to modern demands of school hygiene. The hatchet-and-saw carpenter of the country is generally unable to read architect's drawings or to follow his specifications. Rural schoolhouses are, for the most part, attempts to copy some existing schoolhouse in the township or county. It happens very often, therefore, that new buildings are very little better from many points of view than the old ones. Especially is this true in the older sections of the country.

When we attempt to look on the inside of these buildings, the following significant facts come to light: twenty-five (25) of them receive light from one side only, 880 from two sides, 346 from three sides, and 35 from four sides. In other words, a little less than 2 per cent of the buildings under consideration receive the light from one side. The prevailing custom, representing over 68 per cent, is to have light from two sides.

But this tells less than half the story of the lighting of the schoolrooms. Fourteen (14) per cent have less than one-tenth as much glass area in the windows as floor surface within the room. A little over 46 per cent have an area of glass surface between one-sixth and one-tenth as great as the floor surface. Combining these, you see that more than 60 per cent of all the rural schools included in this survey have an insufficient amount of glass surface to furnish proper lighting, even if the windows were properly placed in all particulars. But those who are acquainted with rural-school conditions know full well that even this amount exaggerates the amount of actual glass surface which is effectual in the proper lighting of schoolrooms.

Under a separate question, facts were gathered relative to the proper use of window shades, and while the returns are not sufficiently satisfactory to come to any final decision, it is very plain that the upper part of a great majority of the windows are handicapped by badly located shades and those which cannot be easily adjusted to suit conditions. Therefore, in order to picture to yourselves something of the hygienic conditions of rural schools, with reference to lighting, you will know first that the windows are wrongly placed, that insufficient glass surface is furnished, and that the best arrangements of window shades is not often found. It will not, therefore, be far from the truth if we were to say that the rural schools receive only about 50 per cent of as much light as they should, and this is improperly distributed.

With reference to the floors of school buildings, our returns show that a little more than half have single floors, while the rest have some form of double floors. I cannot forbear emphasizing the importance of double floors for school buildings in any part of our country. Naturally in cold climates double floors are more necessary, and yet in the Southland I have found that during periods of sharp weather children suffer more intensely from the chill and cold than those who are located in buildings more equably heated. It is practically impossible to equalize the heat in schoolrooms during cold weather if the floors are not practically air-tight. If you consider for a moment that during cold weather a warm room acts as a sort of exhaust to gather in from all directions drafts of cold air, and especially up thru the floor, unless the floors are double and properly deadened, the temperature at the floor line will almost invariably be several degrees lower than that at the breathing-line. This, I believe, is one of the reasons why children and teachers complain when the thermometer goes as low as 65° at the breathing-line. If the floors were properly protected, and the heat of the building properly distributed, I feel certain that it would be comparatively easy for us to reduce the temperature in most of our schoolrooms without objection, and gain thereby from the health point of view. Many of these rural schools reporting single floors are not only uncomfortable but dangerous in cold weather because of the

drafts and the dust brought up in this way. Perhaps it would be just as well, in this connection, to speak of the method of caring for the schoolhouse, and especially the floor. Out of 1,262 replies only 213 teachers stated that there was any janitor service furnished. In other words, 1,049 teachers out of 1,262 are not only required to teach school, but also to keep their school buildings clean. As a result, the following methods of cleansing are used: Five hundred and forty-eight (548) sprinkle the schoolroom floor with water before sweeping, 417 use dry sweeping, 227 use damp sawdust or other dust-absorbing materials, and only 199 have oiled floors. It seems unnecessary to discuss these facts at any length, but such sprinkling as is done, and the amount of dry sweeping, warrant us in saying that 965 schools, out of approximately 1,200 that answered these questions, must have dirty, dusty floors for a large part of the year, not to mention the dust on benches, desks, window-sills, and all possible ledges thruout the room. In this one particular, it seems almost inexcusable that teachers should not be furnished sawdust at least, by the use of which they may be able more easily to cleanse the floor and prevent the great clouds of dust that must necessarily arise with the sort of sweeping here indicated.

It seems to me, then, that two of the important things in connection with the proper hygienic conditions of rural schools are those having to do with carefully constructed floors and the insistance on the proper sort of sweeping and disinfection.

The water supply for country schools is far from satisfactory. I found that, from 1,267 returns on the topics under this general heading, only 567 schools were supplied with well or running water on the school ground, while 700 schools, or nearly two-thirds of all reporting, had to depend on springs and wells outside of schools grounds; and of these 226 were more than one-fourth of a mile from the schoolhouse.

It is obvious that under such conditions as these the children will be deprived not only of fresh water but also of clean water. Where no janitor is furnished, it is clear that the children will have to be largely depended on to carry the water. It would be much more sanitary and acceptable for each child to bring a bottle of water from his home for his own needs, and in a few places it has been necessary to resort to this method.

The receptacle for the water in the schoolroom is generally an open bucket, and approximately half of those reporting use a common drinking-cup or dipper. Recently there has been a rapid growth in the use of individual drinking-cups. This is due chiefly to the laws in many states making it mandatory to avoid common drinking-vessels. In this connection, I should like to say that individual drinking-cups in rural schools are, however, not generally in a sanitary condition. They are frequently mixed up, badly kept, and indiscriminately used. The only safe method is the bubbling fountain connected with a covered water can or jar, or

better still connected with a pressure-tank supply. These are found in only five of the schools reporting.

The toilet facilities of the rural schools are, generally speaking, not only a disgrace, but they are a menace to public health and decent morals. Not over 1 per cent of rural schools are furnished with sanitary toilets. This is a liberal estimate. From the descriptions given in the returns, it has been comparatively easy to decide between those which are passably sanitary and those insanitary. The figures are these: out of 1,296 replies examined, 50 schools have no toilets at all, 52 have only one, and the rest, or 1,174, have two. Nearly half (601) have no pit at all for the refuse, while 631 have an open pit. Not 20 in the whole number are protected against flies, or can be cleaned with any sort of success. Particularly is this true of the South and Southwest. The Rockefeller Sanitary Commission for the Eradication of Hookworm Disease has recently concluded that it will inevitably fail in eradicating this devitalizing disease unless rural communities institute some form of septic toilets both at their homes and at their schools. Likewise, there is little hope of keeping down typhoid epidemics when insanitary toilets, or none at all, are so universal. The biggest problem for the rural communities to solve is the problem of domestic and personal hygiene. The rural school ought to lead in this movement, but you see how far away we are from what ought to be. Every state and county health board having to do with rural or village conditions ought to institute a persistent campaign for better hygienic toilets. Models ought to be available for every community. In this connection, I want to commend especially the great services state boards of health are rendering in this regard. They are doing many fold more to interest and instruct the people in these matters than are the county superintendents and teachers.

The rest of the time at my disposal must be taken up with a mere recital of facts, but all who have had any experience in country schools can see the significance of these facts and fill in the details.

Country schools are about as liable to get north and south light as east and west. A little over half have slate boards, and the rest have painted wood, canvas, painted plaster, or some one of the various preparations of paper or pulp. More than half have their blackboards set three feet or more above the floor, or too high for the primary classes to use properly. Seventy-four (74) begin their work at 8 o'clock, 117 at 8:30, and 1,102 at 9 o'clock. Only 167 dismiss before 4 o'clock. The reports show no cloakrooms of any sort in 537 schools, while 418 have one cloakroom, and 308, two. Where no cloakroom is available, clothing is hung inside the room, or piled up on benches in the corners.

No thermometers are found in two-thirds of the buildings, and even where they are supplied it is manifestly clear either that many teachers know next to nothing about keeping a schoolroom at the proper temperature,

or else the conditions of the buildings are such that they cannot keep their rooms at even temperature. For example, not a few say, "I am supplied with a thermometer, and strive to keep the temperature at 75° to 90° in winter." This may not be so bad as it seems. If the thermometer is above the breathing-line, the temperature a foot above the floors may be as low as 65°. Until the buildings are more carefully constructed, the heating of rural schools will be necessarily very unsatisfactory.

Of 1,268 reports on method of heating, 765 use the common stove, and for the most part (604 cases) locate it in the middle of the room.

There are practically no workrooms furnished, not one-fourth of the desks are adjustable, and few of the buildings are properly decorated.

In conclusion, I wish to say that it is very important at this time to render helpful service to the rural schools. They are eager for better things, but sadly ignorant of what ought to be. Much of the back-to-the-farm movement will be disappointing, unless the rural schools are remodeled and revivified.

THE TESTING OF CHILDREN FOR MENTAL EFFICIENCY

FRANK G. BRUNER, ASSISTANT DIRECTOR, DEPARTMENT OF CHILD STUDY, PUBLIC SCHOOLS, CHICAGO

From the viewpoint of child hygiene it should not seem unreasonable to insist that it is the right of every child to be permitted to do his school work with the least possible expenditure of time and effort consistent with the highest degree of acquisition and mental development. But if one is to accept, even with large discount, the results of scores of investigations on school children, it would appear that scarcely half of the pupils attending our schools are sufficiently free from physical defects alone, so that their school progress is not seriously handicapped. These investigations have shown that defective eyes, ears, teeth, poor digestion, circulation, elimination and nutrition, obstructed breathing, grave nervous disturbances, etc., are dissipating the energies of children and are the sources of economic waste as regards school funds and the future possibilities of those who are to become our producers.

Those of us who have occasion to examine into the physical status of children are often surprised that, considering the *impedimenta* which children frequently bear, their frail organisms do not sooner break under the rack and strain incident to any kind of schoolroom effort, and that their minds are not driven to imbecility because of the enforced inaction that their physical condition often impels upon them.

Happily the time is not distant when this state of affairs will be for the most part historical. In most of the progressive communities certain natural standards have come to be recognized by school and health authorities which shall govern the conditions under which children shall do their

work in school, at least in a negative way. It is conceded on all hands that a child's health shall not be injured by school attendance, his body weakened, his eyesight, digestion, and other physiological functions impaired, and that he shall not be made nervous and sleepless by an overtaxing of his capacities, or by being compelled to work under unfavorable conditions as regards schoolroom lighting, ventilation, heating, seating, etc. The leaven which has been working during the past two decades so effectively has spread its activity until the entire educational body is just about completely leavened. It is gratifying to feel that this matter is no longer in a propaganda stage, and that school people, whether they have medical inspection of the children of their schools or not, recognize this as a desideratum. By a recent action of the Board of Education, every child entering the Chicago schools for the first time next September, will be compelled to present a physician's certificate indicating the condition of his health and the character of his physical defects.

But there is another aspect of child hygiene to which I desire to call your attention, one which to my mind is fully as important as these matters of general health, but which up to the present has received relatively little consideration. I refer to what Professor Burnham of Clark University has designated in his writings as "mental hygiene." Altho as yet their number is small, there are nevertheless those educator prophets who possess sufficient foresight to see the day dawning when the mental side of the child's make-up will receive just as careful study and special attention as is now accorded the physical. It is, of course, obvious that mental examinations will have to be made by those who have been especially trained for this type of work, those who have been trained exhaustively in the principles and methods of child psychology and pedagogy.

These trained child psychologists will examine into the mental content of children's minds and will discover any deviation that may obtain from the average or normal mind of the child of the same age and social status and will prescribe courses of training that will tend to normalize unfavorable tendencies and habits. They will give expert advice regarding children with special gifts in this or that direction. They will outline a system of training that will tend to a healthy mental growth and development, just as the practicing physician offers suggestions looking to children's physical betterment. They will give expert advice that will give definite direction to those interested in vocational guidance, so that a child's likes and dislikes will not be so large a determining factor in deciding his future vocational career as his native capacity and his native tendencies. They will learn to recognize those peculiar marks and characteristics which indicate the direction of certain strong, instinctive tendencies, those which so profoundly influence morals and conduct, and which, when known and intelligently directed, make unnecessary the pain and patient labor required to eradicate unfavorable habits after they have become fixed.

It would not be far wrong to designate such individuals as doctors of mental therapy, and the time, I believe, is ripe when such individuals can launch a work of such vital significance without arousing the suspicion of quackery. Lest those of you not thoroly familiar with the recent results of child psychology should think that all this is idealistic, I desire to assure you that what I have been speaking of is not simply an inchoate dream, born of the faint hope of something which the future may consummate, but an actual possibility and, indeed, one which is being carried into execution daily in the Child Study Bureau of the Board of Education, with which I have the honor to be connected.

Time will not permit me to outline except in briefest form the methods that are employed in mental and physical examinations of children.

We are concerned with data relative to children's physical condition primarily, only in so far as these data reveal imperfections or irregularities in the workings of bodily organs of such character that they significantly affect the mental or moral efficiency of the thinking organs, or perhaps will afford secondary evidence of physical or moral degeneracy.

The physical measurements which we make are similar to those ordinarily taken in gymnasia, with the addition of a rather wide range of observations on the character of the growth, movement, and the condition of the senses. A list of measurements made follows:

Weight; height; height sitting; length, breadth, and circumference of head; girth of chest (compressed and expanded); girth of waist; girth of right forearm; girth of right arm (biceps, contracted, relaxed); capacity of lungs; strength of back, and of legs; grip of both hands; motor ability (rate of movement); accuracy of movement; vision of each eye (distance, near, astigmatic); acuity of each ear.

The observations on growth included:

Size and shape of head (macrocephalism, microcephalism, dolichocephalism, bracycephalism, cranial asymmetry, and retreating, narrow, or low forehead); malformation of the palpebral fissures, the bones of the nose, or the maxillaries; irregularities in the form of the palate and ears; spinal curvatures (lateral or dorsal); deformities of limbs, chest, face, or head; evidences of obesity, emaciation, rachitis; extreme pallor and anæmia; enlarged tonsils; adenoids; and furrowed, misformed, or papillated tongue, kyphosis, rickets, deformities, etc.

On the side of nervous organization, the range of observations included:

Sluggishness; restlessness; asymmetry of posture, head balance or hand balance, muscular tensity, as instanced by the overaction of the frontal muscles, corrugation of the brow, twitching of the finer, or secondary muscles when the body is held rigid (fingers, eyelids, tongue, lips, facial muscles, etc.); relaxed or flabby state of the muscular tissues in general, and particularly that about the eyes and mouth; and deficiency of motor control or co-ordination, as exhibited in awkwardness of movement, lack of precision in adjustments, and one or the other of the commoner speech defects—hesitation, lisping, stammering, stuttering, defective articulation, phonation or breathing, tic, chorea, muscular spasms, epilepsy, etc.

Height, height sitting, and weight are perhaps the best indices of growth that we possess at present. They afford some criterion of the rate of

development and evidence as to whether there are now, or have been in the past, any serious nutritional disturbances, such as to affect directly or indirectly school work. The measurements of chest, waist, forearms, and upper arm, together with those of vital capacity, strength, motor ability, and accuracy, serve to give a more accurate statement of a child's fund of vital energy than is possible from mere observation. Moreover, they make it possible to suggest lines of necessary corrective treatment and indicate certain physical limitations which children possess and their liability of fatigue in the pursuance of various kinds of work. It is altogether obvious that moral training and correction too, to be most lasting, must be in keeping with the physical organism upon which thinking and conduct rests, and in full recognition of the physical handicaps under which children are trying to live moral lives.

No one, perhaps, more clearly than the diagnostician himself, recognizes the inadequacy of physical measurements unsupported by observation, when trying to size up a child's physical possibilities. The observations on growth thus supplement the information gained thru the quantitative measurements. But these observations have a wider meaning, in that thru them it is frequently possible to learn something, in the absence of accurate history, of children's heredity, and the physiological factors which have been operative in making them what they are, both physically and intellectually. A poor heredity is almost certain to leave certain marks in the nature of irregularities of growth and deformities of one kind or another.

Nutritional disturbances, in the form of rachitis in infancy and the extreme anæmias in later childhood, are such that a wholesome dietary and hygienic régime will for the most part counteract. Altho certain malformations in bones and some abdominal features cannot be entirely corrected or obliterated, their influence on conduct and scholarship may be largely nullified. Enlarged tonsils and hypertrophied adenoidic tissues, on the other hand, are recommended for removal by surgery or cauterization, inasmuch as both directly and indirectly they tend to dampen intellectual ardor, cause nervousness, and induce petulance and irascibility. Almost any hypertrophied tissue, too, acts as a veritable intake of contagion—bacteria, toxins, etc.—thru its loosely constituted and diseased cellular tissues.

Defects in movement or motor control of course have their basis in a more or less disorganized state of the nervous system, and nervous disturbances are always slow to yield to treatment. In many instances, too, the bad posture, head and hand balance, the spinal curvature, and the muscular tensity and inco-ordination are of long standing, and therefore their early recognition and treatment are the more necessary. Irregularities of the order just indicated, moreover, are such as will not yield to medicinal treatment alone. Indeed a wholesome hygienic care, and a repertoire of

physical exercises adapted to the needs of each individual child must supplement the physician's prescription to attain permanent results.

In the same category with nervous disturbances, that is, with reference to their effects upon scholarship and conduct, are defects of hearing and vision. It is not infrequently that a child's inability to hear and see well in itself results in his becoming irritable, restless, resentful, and dull, and consequently a truant or incorrigible.

Just so far as possible it has been our aim to employ only such tests for measuring children's capacities as will not be affected by their schoolroom standings, and especially is this necessary of boys who find their way to the Chicago Parental School, since, on account of irregular school habits, and the want of effective co-operation on the part of the home with the work of the school, their mental ability is ordinarily far in excess of what their school standings would seem to indicate. Manifestly teachers should seek to further children's school attainments as fast as their capacities for learning and the limit of time will allow, and certainly, too, better results can be obtained if they are clearly conscious of the directions of these mental limitations, so that their teaching may be modified in kind and direction so as to be in keeping with them. The mental tests, therefore, form the most prominent features of the testing of children and, in point of fact, the purpose of the physical observations, as has already been said, is in no small degree to make more perfect the mental diagnosis.

A preliminary word is perhaps necessary with reference to the particular mental tests made. Many of the children we are called upon to assist are school laggards, grading from one to five years lower than normal, as regards school standing, than their respective ages would warrant. Take the thirteen-year-old boys in the Chicago Parental School on a certain date, as an example: only one was in grade VII or above, 7 in grade VI, 7 in grade V, 18 in grade IV, 27 in grade III, 17 in grade II, and 4 in grade I. Boys of younger years showed a distribution, in every essential respect, similar to that of the thirteen-year-olds, so that it is evident that all mental tests which in their performance call for familiarity with the arts of the schoolroom would, by the very nature of the case, have to be discarded in a testing of them; and this has reference to a large number of the tests of association and reasoning frequently employed in pedagogical laboratories. Such tests had to be selected and devised, consequently, as would be suitable for use with children who are unable to read the simplest sentences in English, and to whom, in many instances, even the letters of the alphabet and the Arabic numerals, from one to ten, are wholly unknown.

In examining the children of the lower grades of intelligence, the tests frequently have to be limited to those of imitation and suggestibility. This may consist merely in having the child hold a stick, pencil, or object so that its general direction will correspond with one which the experimenter holds or to which he points. They grade in complexity then, from

this up to those calling for a drawing from sight of the "treble clef" or a complex maze without raising the pencil from the paper. The sorting of cards, blocks, sticks, yarns, according to the color, size, and shape of the objects themselves or of their pictures, are other suggestibility tests used. Another test along the same line requires the child to place a mark thru each of one hundred *a*'s arranged orderly in rows, which calls for nothing further than to follow out a repetitive process.

After the imitation and suggestion tests come those which seek chiefly to test ability to perceive objective differences, and this requires a slightly higher order of intelligence. In this line are such tests as call for the discrimination of small differences in color; or the bisecting of a line; or in the marking-out of each of one hundred *a*'s distributed indiscriminately thruout a paragraph of print; or in placing a stroke with a pencil thru all the groups of four *k*'s in a paragraph made up of groups of one, two, three, four, five, and six *k*'s respectively; or in placing the appropriate numeral into each corner of four, dissected from the oblique cross, and distributed promiscuously in rows;[1] in discriminating the least perceptible difference in weight and in size, etc.

It is always important for a teacher to know in what terms learning is best accomplished, whether thru seeing, or thru the sense of hearing, or whether by the more fundamental method of manipulation, i.e., activity, the process of doing. To determine this point, one must ascertain what is the child's prevailing form of imagery, and for deciding this question there has been suggested a number of methods, but none, perhaps, better than that of measuring the rate and ease of learning, thru test problems and questions; appealing in turn predominantly to each of the three major types of imagery and association, the visual, the auditory, and the motor.

The superiority of motor over visual methods of learning, or vice versa, may be tested by having boys learn to draw from memory a complex maze, first as the result of simply having looked at it, and again after having copied it. This method has been applied, by some experimenters, to spelling tests in order to determine the most advantageous ways of teaching spelling, but in the case of spelling the mechanical work of making the letters is in itself such as to distract attention and interfere with the normal learning process.

The determination of the memory span for numerals, or words heard, seen, and spoken or written, is another method which is used to get at the prevailing type of an individual's mental imagery. Still another, and to my mind a better one, consists in determining the number of repetitions necessary to repeat one numeral or one word more than the normal memory span, each for auditory, visual, and motor memory.

In testing memory, the method of the memory span, that of connected

[1] The test consists in recognizing the similarity between the corner in the row and the one in the form at the top of the page and placing within it the numeral which is in this corner in the form.

discourse (descriptive and logical), and that of ascertaining the number of repetitions required to repeat one in excess of the normal memory span (just described above) are employed. All of these methods, moreover, are too familiar to require any elaboration or further description.

The terms "learning" and "association" are equivalent in the sense in which they are here employed. Learning in school, during the first years, is concerned in large measure with getting possession of the mechanical symbols employed in written language and numerical operations, and hence it is altogether fitting that the tests of learning employed with children should be in terms of associations which are more or less conventional and abstract. Of the large number of learning tests we employ, I shall offer only four or five samples.

The first test of learning is as follows: On a test form before the child, appear in rows in haphazard order, one hundred geometric figures: (1) right triangle resting upon its base, the right angle at the right; (2) the same with the right angle at the left; (3) a circle; (4) a square resting upon one side; (5) a square resting upon one angle. The same forms appear at the top of the test sheet in a row by themselves, and within each is a numeral or letter. With this row in direct vision, the boys are required to place in each geometrical figure on the page the numeral or letter which is within this figure at the top of the test form. The time required to complete each two rows is then taken, and the rapidity of making associations or learning measured by the diminution in time required for the successive performances.

The second learning test is fundamentally similar to the above. In place of geometrical figures, however, numerals and letters are associated with colors, and instead of writing, the boy repeats audibly, as fast as he can, the numeral name of each color. The time is taken as before.

In the third test a transition is made from forced arbitrary associations to arbitrary logical associations. This test is identical with the last one described, in connection with suggestion, except that here the work is done from memory, and not perceptually, as before.

The fourth association test involves part-whole associations, and simple perceptual reasoning. The situation is that of the ordinary criss-cross, the several parts of which—nine in all—duplicated to the number of fifty, appear in indiscriminate order, upon a regular test sheet. Within the angles or parts of the criss-cross, appear the numerals one to nine, in regular order. This situation appears upon a separate sheet, is thoroly explained to the boy, and then removed from sight. The boy must keep this situation in mind, and, from memory, write into each of the fifty forms the numerals associated with it in the criss-cross.

Lastly, associational ability and reasoning power are measured by the child's facility in solving certain practical problems, involving cause and effect, the genus-species relation, part-whole, antithesis, etc. Some of these

were adapted from tests of intelligence formulated and used by Professor Binet, of Paris, and Professor de Sanctis, of the University of Rome. Where they are adaptable, use is made also of both the Binet-Simon and the de Sanctis tests as a whole. However, our experience with these has not been, on the whole, very favorable.

I wish I might say that we are able to diagnose infallibly the mental and moral status of all children and that in individual cases we are able to determine with finality the significant deviations which large numbers of children show in mental balance, mental capacity, and moral poise, and, having diagnosed them, to formulate a set of rules and guiding principles which, if followed in the home, at play, and in the classroom, result in a maximum of mental and moral growth, with a minimum expenditure of effort. Alas, we are not yet able to make easy and effortless the discipline and instruction of every child, for in some instances these come only with struggle and worry. Unfortunately, too, our psychologists have not yet learned enough about the workings of children's mental machinery and the methods to employ in testing it, so that one may dogmatize to any extent. But is a physician's diagnosis of internal diseases definite? Do physicians do more than make a series of scientific guesses? In psychology, as in medicine, we as yet know only in part. Nevertheless, psychology has that to offer to the careful student who will give enough time and energy to it to master it—and it cannot be accomplished in one or two summers—which will make it possible for him to determine fairly accurately the degree of a child's mental defect or the character or degree of the mental deviations or the nature of a child's moral tendencies. It is possible for him to inform himself, likewise, so that he may prescribe lines of treatment which shall be particularly applicable to the peculiar needs of any individual case.

The economy resulting from knowing children's mental and physical condition, accurately, as early as possible after their entrance into school is, of course, patent. When it is understood that until a child's eccentricities are recognized and taken account of, his handling and instruction must of necessity be indefinite, it is clearly evident that a foreknowledge, even tho incomplete, will obviate the expenditure of needless time and effort. Certain other characteristics of children's minds are closed books to those who are not expert child psychologists, and yet they are important for teachers to know if their teaching is to be most effective, and particularly is this true if the children are in corrective institutions, where the training is concentrated and intensive. The knowledge of certain subtle peculiarities has a tendency to put a teacher *en rapport* with a child possessing them, with the result that teaching is simplified, effort is not misdirected, the pupil is better behaved, he makes faster progress, and both teacher and child are happier. This, briefly, is a suggestive field for a mental hygiene.

I am aware of only one place where the program I have just outlined is carried out so as to include every child under instruction. This is at the

Chicago Parental School, where every boy on admission is subjected to careful and exhaustive physical and mental testing. On the findings of these testings there are prepared written reports for the information and guidance of those having the boys in charge—the superintendent, teachers, and family officers. This report on each boy points out his physical imperfections, any peculiarities in the workings of his mind which may require special methods of teaching and discipline, and a description of the nature of his moral instincts and tendencies. There is outlined also a suggestive course of training, mental, moral, and physical, which is suited to accomplish the best possible results in each particular case.

The effect of this expert work at the Chicago Parental School has been a considerable shortening of the necessary period of detention of the boys, and in consequence a very obvious economic gain to the taxpayers of the city of Chicago. And what about the boys themselves? They are being helped intelligently to break up their bad habits, their misdirected lives are being transformed, and their interests turned into wholesome channels. The boys are saved to society instead of being repressed for a time, institutionalized, perchance, and then set at large as social misfits.

We believe that the time is not distant when such a program will be carried out with reference to every child in the public schools. The suggestion is economically sound and is a moral obligation which society owes to its children.

This is an illustration of only one of the many possibilities of the application of mental hygiene. Chicago has been doing pioneer work along this line for a number of years, but we have faith to believe that not many years hence, there will be universal recognition of the fact that the hygiene of mind is as great a social necessity as is the hygiene of the body.

SCHOOL DISEASES

EDWIN O. JORDAN, PROFESSOR OF BACTERIOLOGY, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

There is no doubt that children of school age contract such diseases as measles, scarlet fever, and diphtheria much more frequently than older persons. Sharp difference of opinion exists, however, as to the actual part played by school attendance in the transmission of these diseases. Some observers maintain that while the maladies in question are diseases of school children, they are not properly to be regarded as school diseases. From this standpoint diphtheria, scarlet fever, and the like are especially prevalent among school children, not because school conditions favor their transmission, but simply because children of school age are more susceptible to infection. On the other side are those who hold that school attendance plays a large part, if not the chief part, in the dissemination of infectious disease among groups of children of susceptible ages.

Viewed broadly, there is much to favor the latter opinion. All that has been learned about the modes of transmission of certain diseases, notably diphtheria, indicates that taking a large number of children out from their restricted family and neighborhood relationships and bringing them into contact with a much larger group will increase the opportunities for infection. In some other fields of investigation this fact is well established. The advent of a typhoid-carrier in a military encampment will give rise to more cases of disease than if the carrier had remained by his own fireside in contact with relatively few persons. In the same way, it may be assumed, a convalescent or carrier attending a school has a wider sphere of influence than in his own block; that is, he may be the means of conveying the spark of contagion to a larger circle. As regards specific opportunities for infection furnished by the school, it must be admitted that while the slate, the common drinking-cup, and the roller-towel are fast passing away, sufficiently adequate facilities for the transfer of disease germs still exist in the friendly exchange of pocket handkerchiefs, lip-moistened lead pencils, chewing-gum, and the like. One danger peculiarly difficult to guard against is the discharge of minute droplets of spray from the mouth or nose in the act of sneezing, coughing, or speaking. These "infectious droplets" may float about in the air for some minutes and, as shown by experiment, can be borne by air currents to a distance of several feet. In the opinion of some investigators they are the principal factors in the spread of tuberculosis. The school playground as well as the schoolroom must be considered in its bearing on the subject of school diseases. The significance of school attendance on the public health side lies not only in the assembling of children in a room, but also in the bringing into more or less intimate association a number of children who would otherwise not have met at all. Increasing the number of associates must necessarily increase the chances of infection.

There can on the whole be no doubt that school attendance favors in some degree the transmission of disease. The real point at issue is the importance of school infection compared with other sources of infection. If the cases of infectious disease for which the school can be held responsible are relatively few in number in comparison with the cases contracted thru other channels, then it is manifestly wrong to speak of such diseases as school diseases; they are rather diseases to which school children are liable because of their age predisposition. The controversy is therefore over the actual proportion of cases contracted thru the agency of the school.

Here there is a wide divergence of opinion. Some observers point to the fact that cases of diphtheria and scarlet fever show a marked increase in the autumn when the schools open and an equally definite decrease in the summer when the schools are closed, as evidence of the importance of school infection. Others regard such fluctuations as merely the expression of seasonal influences, with which school closings and openings happen to coincide.

Close analysis of the statistics is thought to support the latter view. Kerr,[1] in London, and Chapin,[2] in Providence, R.I., as the result of statistical studies, believe that diphtheria and scarlet fever are rarely spread in schools and that the great mass of cases originates independently of school conditions. After a careful examination of the weekly numbers of reported cases of diphtheria and scarlet fever in Chicago for 1908–12, I have been unable to detect any well-marked variation in the numbers of cases at the dates of the opening and closing of schools in September and June or at the time of the Christmas and spring holidays. Other investigators, handling other statistical data, have reached opposite conclusions. In some cases the Christmas and Easter holidays have been observed to cause apparently a diminution in the number of diphtheria cases. The whole inquiry undoubtedly presents serious statistical difficulties. Attention, for example, has been drawn to the fact that both diphtheria and scarlet fever cases in children grouped according to age gradually increase in number up to four or five years of age and then begin to fall off. As Chapin expresses it:

> It is remarkable if school attendance has sufficient influence to cause the autumnal increase in these diseases as is so often alleged, that it has not sufficient influence to at least keep up the disease after children reach the age when they begin to go to school.

It is possible, however, that factors operative in early life but disappearing later, such as great age susceptibility and great liability to milk-borne infection, may be in some degree replaced later on by the danger of school attendance. In other words, scarlet fever and diphtheria may be much higher in children of school age than they would be but for the influence of school attendance in multiplying chances for infection. Chapin's tables show that there were in Providence during a period of 21 years 813 diphtheria and 1,171 scarlet fever cases reported in four-year-old children as contrasted with 565 cases of diphtheria and 868 of scarlet fever in eight-year-old children. Such figures do not necessarily prove, however, that the number of eight-year-old cases is not in part or even in large part due to school attendance.

We need not assume that conditions are alike in all infectious diseases. Measles, scarlet fever, and diphtheria seem to stand each on a somewhat different footing. Measles appears to be generally regarded by school officials as commonly contracted at school. Unfortunately few exact statistical studies have been made. In a recent epidemic reported by Raffle in the *Lancet*,[3] 778 cases occurred in a susceptible school population of 2,180. These might of course have been contracted either at school or at home. After closing the schools and making allowance for the incubation period only 75 cases occurred among 1,400 susceptible children. There are

[1] Report of Medical Officer [*Education*], London, 1909, Vol. 63.

[2] *American Journal of Public Hygiene*, 1910, Vol. XX, p. 813.

[3] *Lancet*, February 3, 1912, p. 294.

obvious sources of error in statistics compiled in this way, but Raffle's results are at least suggestive. According to Kingsford,[1] in Liverpool the connection between school attendance and measles is very clear. In 1909–10 in studying the occurrence of measles in individual school children there was a history of a recent case in the house in which the child lived in only 1.5 per cent of the school cases. Kingsford also states:

> Where there is a susceptible school child in the family, it is found in practically every instance that this child is the first to contract the disease and is the one chiefly responsible for handing it on to the younger members of the family who do not attend school.

Other observations, like those of Royer on an epidemic of measles in the Haverford School,[2] tend to emphasize the importance of school attendance in spreading this disease, but further and more comprehensive studies directed toward a definite end are needed.

Scarlet fever seems to be less generally considered a school disease. Many investigations point to milk supply as a prominent factor in the spread of scarlet fever, and there is a growing disbelief in the importance of school infection. D'Ewart[3] has recently questioned the responsibility of schools for the spread of scarlet fever on the basis of a careful school canvass in Manchester, England. He points out that in Manchester summer closing of the schools can hardly account for the summer drop in scarlet fever cases, since in summer the number of children in the city is reduced by about 37 per cent while the scarlet fever decrease is only 17 per cent. As in Providence and some other cities, so in Manchester there is no jump in scarlet fever cases at the age when school-going begins. While this fact is suggestive, it is, as already pointed out, not a conclusive argument against the importance of school infection, since a rapid waning in the number of cases due to infected milk might completely mask a slighter increase due to school infection. The question is really to what extent school-going keeps the cases at a higher level than would otherwise be maintained. D'Ewart, after surveying the whole ground, assigns little weight to school attendance, and states that

> when the series of cases is complete, evidence will be produced showing that the bulk of the cases occurring in school children can have nothing directly to do with school.

Such instances, however, as the one described by Roach[4] show the important part sometimes played by the school in the spread of scarlet fever.

In both scarlet fever and measles unfortunately we have not yet discovered the specific cause and know little or nothing about modes of infection and points of entrance. This uncertainty robs even careful studies of a large part of their value and reduces much of our discussion of these two diseases to the level of conjecture.

[1] *The Medical Officer*, 1912, Vol. VII, p. 237.

[2] *Report of Commissioner of Health of Pennsylvania*, 1909, p. 219.

[3] *The Medical Officer* [London], March 2, 1912; Abstract in *American Journal of Public Health* 1912, Vol. II, p. 313.

[4] *American Journal of Public Health*, 1912, Vol. II, p. 410.

Diphtheria in this respect stands on quite a different basis from scarlet fever and measles. Here we have a mass of exact and detailed bacteriological observations which we might suppose would enable us to approach the problem with fuller understanding. It is somewhat surprising to find here also the same difference in opinion as to the importance of school infection. Kerr[1] and Chapin[2] apparently regard diphtheria as being, like scarlet fever, little affected by school attendance. Hüls,[3] fortified by eleven years' experience as school physician, goes so far as to say flatly that "diphtheria is not spread by schools," and Versmann,[4] while admitting that occasional outbreaks of school diphtheria occur, believes that these are exceptional.

On the other hand, a considerable number of investigators have recorded outbreaks of diphtheria where the connection with school attendance could not be doubted. Many of these epidemics are so typical of diphtheria outbreaks in general as to arouse suspicion that the same factors are at work in a large proportion of the uninvestigated cases. Macdonald,[5] after studying a recent outbreak states:

> All school carriers were found to be intimately associated at play with other cases and carriers, and mere classroom proximity was found to be of little importance in spreading the disease.

In England Thorne-Thorne[6] long ago called attention to the influence of school attendance upon diphtheria and cited numerous instances where schools were plainly implicated in the diffusion of infection. The same writer also points out the coincidence between the putting into effect of the compulsory education act in 1870 and the increase in diphtheria prevalence which began in England and Wales about the same time. It is interesting to note that altho Thorne-Thorne made his observations before precise bacteriological methods were in use he clearly recognizes on epidemiological grounds the part played by carriers in disseminating infection. Ward and Henderson[7] in this country, Vervoort[8] in Amsterdam, Seligmann[9] and Frank[10] in Germany, and many others have shown the reality of school infection in definite instances. Frank, for example, in studying an epidemic of diphtheria in 1910–11 among the pupils of a girls' school in Charlottenburg, found that conveyance of infection must have taken place in the school, since the children were recruited from all parts of the city, some of them coming from districts where at the time no diphtheria cases were known to

[1] *Loc. cit.*

[2] *Loc. cit.*

[3] *Zeitschrift für Schulgesundheitspflege*, 1911, No. 3. Cited by Goldstein, *Vierteljahrschrift für gerichtliche Medicin*, 1912, Vol. XLIII, p. 150 B.

[4] *Zeitschrift für Schulgesundheitspflege*, 1910, No. 3. Cited by Goldstein.

[5] *Lancet*, March 25, 1911, p. 795.

[6] *Diphtheria*, London: Macmillan & Co., 1891.

[7] *California State Journal of Medicine*, August, 1907.

[8] *Hygienische Rundschau*, 1908, Vol. XVIII, p. 1459.

[9] *Zeitschrift für Hygiene*, 1911, Vol. LXX, p. 35.

[10] *Hygienische Rundschau*, 1912, Vol. XXII, p. 325.

exist. In 1909 the number of children in this school developing diphtheria amounted to only 0.7 per cent, which was about the average for the other schools of the city, while in 1910–11 the number of diphtheria cases increased to 14 per cent. Detailed investigation of the school by classes showed always a certain relation between the number of new cases and the number of diphtheria-carriers; most of the cases occurred in the classes in which diphtheria-carriers were detected. In those classes where carriers were lacking there were only one or two cases or none at all. Westenhoeffer points out that in the Berlin epidemic of 1911–12 the schools played the chief rôle in the dissemination of infection. Among other recent writers Goldstein[1] has laid stress on the importance of the healthy diphtheria-carrier in spreading disease.

The discovery of the part played by the healthy germ-carrier throws light on the probable origin of certain obscure cases of infection. A child in a family in which a case of diphtheria exists may bear in its throat living diphtheria bacilli without manifesting any sign of disease. If this child is allowed to enter school, a playmate may acquire the bacillus without in its turn becoming definitely ill. This second child, however, may take the germ home and pass it on to a non-school-going child in the same family, who then may develop a typical case of diphtheria. In this and even more circuitous fashion a diphtheria bacillus may be handed around until the original source is difficult to trace. Variations in the virulence of the germ and in the favorableness of the soil in which it lodges determine the actual development of a "case." If a large number of children in a school happen to be in a susceptible state from climatic or other reasons, or if a diphtheria bacillus introduced into the school happens to have unusual infective power, then a school epidemic will result.

Methods of control of school and institutional outbreaks of diphtheria are therefore coming to be focused on the detection and exclusion of the carrier. Summary disinfection of innocent chairs and tables and enforced school closure are in general found to be less effective than the discovery and isolation of the living bearer of diphtheria bacilli. When school attendance is regulated by bacteriological findings, school epidemics quickly subside.

Altho we must freely admit that for diphtheria, at all events, evidence of infection thru school attendance is entirely convincing, we are as yet not in possession of sufficient information as to the relative importance of this source. Our knowledge of the mode of spread of scarlet fever and measles is in a still more imperfect condition. It would seem desirable if thru the auspices of this Association an extensive and searching investigation under expert supervision might be made of this question. To what extent and under what conditions are the infectious diseases of childhood spread by school attendance? At present in combating the spread of infectious

[1] *Vierteljahrschrift für gerichtliche Medicin*, 1912, Vol. XLIII, p. 136.

disease without adequate knowledge of the channels of infection we are in danger of wasting our strength in misdirected effort, and the conservation of human effort is certainly one of the most desirable forms of conservation. Experience has shown us that not all theoretically possible methods of preventing infection are equally efficacious in practice. For each disease we should aim to adopt special methods carefully devised to produce the maximum effect with the smallest amount of injury or disturbance to the normal relations of human life. To this end it is essential to discover the ways in which infectious disease is commonly spread as well as the ways in which it might conceivably be spread. The abolition of the common drinking-cup is a highly desirable procedure even if only an occasional case of infectious disease is prevented, but has anyone ever put on record whether a measurable diminution in disease has taken place in a school after the introduction of bubbling fountains? In point of fact we do not know to what extent the various influences summed up under school attendance are a factor in the dissemination of infectious diseases. The question should be investigated.

DISCUSSION

Daniel P. MacMillan, director of the Department of Child Study and Educational Research, public schools, Chicago, Ill.—I think that it is indeed a fortunate circumstance that there is already established a central bureau for child hygiene in the department of the United States commissioner of education, and our chief duty may, in a word, be said to be concerned with the desirability and necessity of keeping its interests and activities living and worth while, and in turn of sharing in its strength and serviceableness thru active co-operation.

I am very glad to learn of the scope of its plan of organization relative to child hygiene, and if carried out it is easy to forecast its future invaluable function in the life of the school child. I personally am hopeful that the bureau will prove to be not only a valuable clearing-house on all matters relating to the child himself and the medium in which his learning must be carried on, but also a collector and conservator of the best known about the topic, a distributor of literature and information, and finally a stimulator in the line of research and suggestive improvements of all kinds.

In line with this general topic I am asked to tell you something of our own work in the Chicago public schools. According to the original plan of organization in 1899, the Department of Child Study and Educational Research of the Chicago public schools was designed to give its attention to three more or less distinct functions represented by: (*a*) original work of investigation of school children and school problems for children, not only to subserve such local interests as might be represented in the problems of teaching and administration, but such as might prove of general scientific importance; (*b*) dispensing information to the teaching body of the city concerning children and their education, gleaned from the results of other investigators as well as from our own, such information to be given in any one or all of the following ways: detailed and formal reports, lectures, and private conferences with mothers, teachers, social workers, and the like, on particular cases or with reference to child problems of all sorts; (*c*) giving active assistance in the practical problems of the school system that center about special and exceptional children.

The emphasis that has been placed on each of these three aspects of the work has varied from time to time. At first it was necessarily concentrated more in research:

in feeling out the fields of greatest serviceableness, in establishing our own rules of work, and in determining the natural order and rate of development of the physical and mental powers of children other than their known ability or inability to make regular school progress.

The second feature of our duties has necessarily changed somewhat in line with the temporarily enforced obligations devolving upon us. The lengthened formal reports have been largely of local interest about special problems, but I am still sanguine of securing adequate time in the near future for more detailed investigations of the normal child's life and conditions of learning. Moreover, it should be mentioned that for every child examined, a special report is sent to the person or organization calling our attention to the case, detailing the findings, describing the needs of the child both physical and mental, and telling how and where such physical care can be secured, and where he can be placed to obtain the educational opportunities best adapted to his requirements as outlined in his pedagogical program. In this way the department is, to no small degree, under the necessity of acting in the capacity of a special bureau of information on the two sides of child life.

With regard to the third main division of work—that is, giving practical assistance with special and exceptional children—it should be stated that this feature has had phenomenal growth. In behalf of certain of these children, such as the deaf, the blind, the crippled, the truants and incorrigibles, the subnormals, and children afflicted with minor speech defects, special provisions are made by the Board of Education. With reference to others investigated, there are no special opportunities furnished in the form of schools, centers, special teachers, and the like, so that advice must be given relative to their disposition in the regular grades. They may need only special physical care, or, in addition, some adaptive educational requirements such as the flexibility of the general course of study will permit; or it may be necessary for them to be taken out of school for a short time because of the ill effects upon them mentally and physically; or, perchance, they must be excused from attending public school for the sake of other children, since their low grade of mentality renders them incapable of taking advantage even of the special provisions of a public-school education, or because of the menace which they present to other children in the way of epileptic attacks, grave moral offenses, and the like.

Further, it must conduct, with the co-operation of physicians from the civil service approved list, all physical examinations of persons securing certificates to teach in the public schools, teachers returning to service after a definite period of absence, and all graduates of the high schools who enter the normal school.

Finally, it should be noted that the Board of Education has made its first step to guard against the charge of paternalism, sometimes heard against boards of health or of education, and with the opening of the next school year the adopted plan will be inaugurated of having each child entering school for the first time, physically examined at the parents' order, on a uniform plan, by the family physician or other legally qualified practitioner of medicine. These records are to be kept by the Board of Education, and it is hoped that, in time, valuable information can be secured to supplement the often rapidly executed and cursory examinations of the regular medical inspectors of schools.

STOOP SHOULDERS AND FLAT CHEST IN SCHOOL CHILDREN

CHARLES A. L. REED, M.D., PROFESSOR IN UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO

The school-teacher is today the primary factor in the new and beneficent régime of the medical inspection of schools. Where medical inspection is not provided by law, the teacher is the exclusive factor. She is

the protector of the pupil, the school, the community, and herself against any deleterious influence that may become operative within or thru the school. She needs, therefore, to be apprised of the significance of every departure from the normal that may be manifested by any pupil under her care. I shall show some charts which will explain the not usually understood significance of one of the most serious conditions that can exist in school children. I allude to "stoop shoulders and flat chest," specifically mentioned under this title in the textbooks on school inspection. I can, however, better present the essential features of this condition, as it manifests itself in my practice, by alluding to the following example:

FIG. 1

FIG. 2

FIG. 3

A young woman, aged eighteen, was sent to me by Dr. Libbert. She was of only medium height, weighed ninety-two pounds, and was poorly nourished. She was stoop-shouldered, flat-chested, with a tendency to protrusion of the lower half of the abdomen (Fig. 3).

She had been constipated from early life and was almost daily the victim of severe headaches. Her eyes had been examined and glasses adjusted, but the headaches continued. She had a poor appetite and could not sleep well. She complained of frequent abdominal pains, especially in the lower right quadrant, and the upper left quadrant of the abdomen. She suffered from frequent gaseous distention, especially in the left side of the abdomen.

She had been treated for years with cathartics and enemas. They brought temporary relief from headaches which, however, soon returned worse than before. She had run the whole gamut of digestants and tonics. Fruits without meats, meats without fruits, proteids without carbohydrates, carbohydrates without proteids, the domestic cuisine and the foodless

foods of commerce had characterized her dietetic experiences. Finally, at school, she, with all the other pupils, was put thru a course of calisthenics including violent flexions and extensions of the body, dumb-bells, Indian clubs, ropes and pulleys, and all the rest. Dr. Libbert stopped these practices and remanded her for diagnosis.

I found that she had marked displacement of the colon. This diagnosis was confirmed by X-ray examination. Fig. 4 is an accurate drawing made from the X-ray plate. It shows the colon extending up the right side to the hepatic flexure; there it is acutely angulated upon itself and

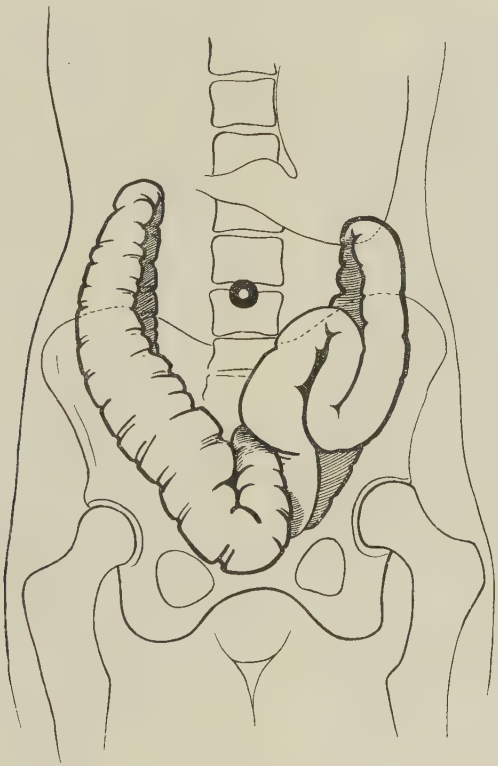

Fig. 2

drops sharply downward into the pelvis; there it is kinked upon itself several times; then it arises to the splenic flexure where it is again acutely angulated. Thence it descends in a normal way to the sigmoid, which is abnormally redundant.

The abnormal condition of the colon as shown in Fig. 4 and Fig. 9 may be appreciated by a glance at Fig. 5, which shows the normal course of the colon. This drawing was also made from an X-ray picture in my possession. It is a front view and shows (1) the ascending colon going up to the hepatic flexure; (2) the hepatic flexure as really a curve, without obstructive

angulation; (3) the transverse colon crossing the upper zone of the abdomen from right to left obliquely upward to the splenic flexure; (4) the splenic as really a curve without obstructive angulation; (5) the descending colon extending down to the sigmoid flexure; (6) the sigmoid as a letter *S* with curves, but without redundancies or angulations.

In contrasting these two colons, it is easy to see why, in Fig. 4, there should be constipation, absorption of poisons, headaches, mental depression, and nervousness. It is equally obvious why, in Fig. 5, there should be no

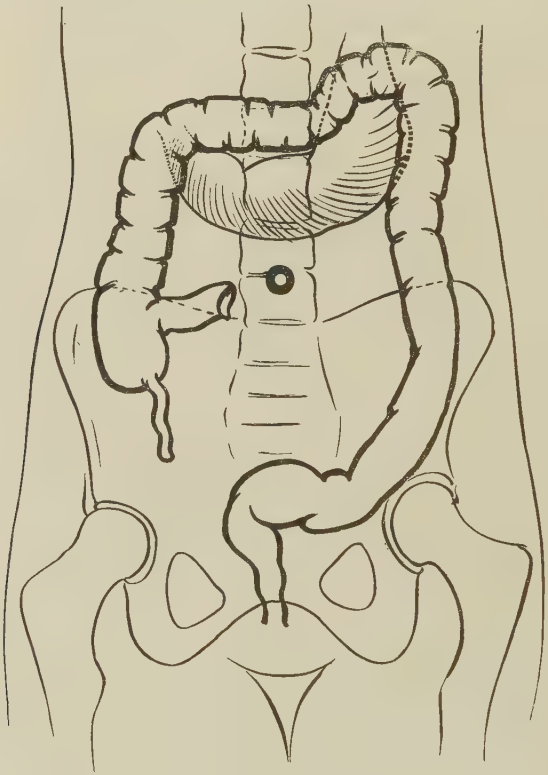

FIG. 5

mechanical obstructions, no constipation, no hyperabsorption of poisons from the intestines, no headaches, no nervousness.

But there is another aspect of these cases that is of special and practical importance to teachers, to medical inspectors, and especially to physical directors of schools. It becomes evident if it is remembered that, when the abdominal organs sustain their proper relations to each other, as shown in Fig. 7, the posture of the body is erect, and its contour normal.

When, however, the abdominal organs, especially the stomach and colon, are displaced downward, as shown in Fig. 6 and Fig 8, the lower

thorax caves in to a certain extent; thus throwing the shoulders forward in a stooped position, and flattening the chest, as shown in Fig. 3. It becomes equally obvious that any force, the incidence of which causes either downward traction or pressure upon these already displaced viscera, is calculated to aggravate the condition.

My object in placing emphasis upon this class of cases that are finding their way to my operating room with rapidly increasing frequency is that the cause of "stoop shoulders and flat chest," as I have here outlined it,

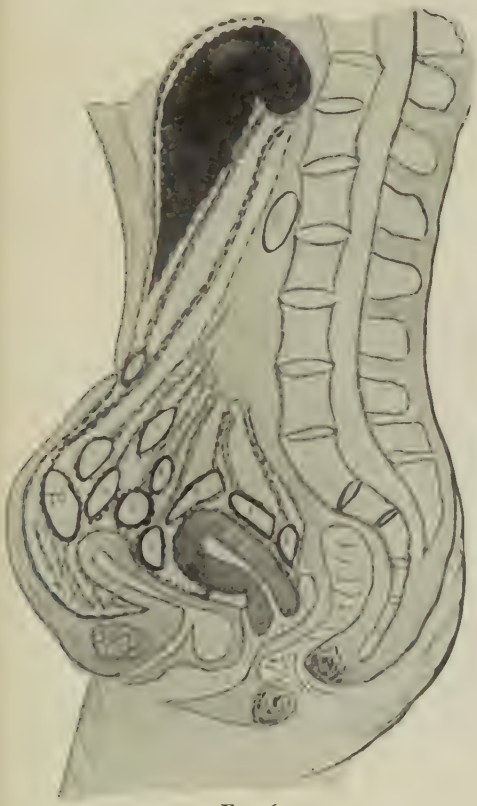

Fig. 6

Fig. 7

is not taught in the standard works on the medical inspection of school children. Thus one work, one of the very best, one that ought to be in every school-teacher's hands, publishes an excellent drawing of correct posture (Fig. 1), and an equally excellent one of "stoop shoulders and flat chest," illustrative of incorrect posture (Fig. 2).

This incorrect posture (Fig. 2) is attributed to obstructions in the upper air passages and to difficulty of hearing. It is true that these conditions do cause stoop shoulders and flat chest, but they are not the causes of possibly a half of the cases. Diseases of the spine, redundant shoulder

blades, and other conditions are to be taken into account. In instances in which displacement of the stomach and colon is the cause, as it is in probably half of all the cases, the treatment prescribed by the author of the book in question would be most disastrous, as it was in the case that I quoted, and that inspired these observations.

Thus, he advises calisthenics and goes to the extent of specifying extreme extension practiced even by bending backward over a large quarter hoop.

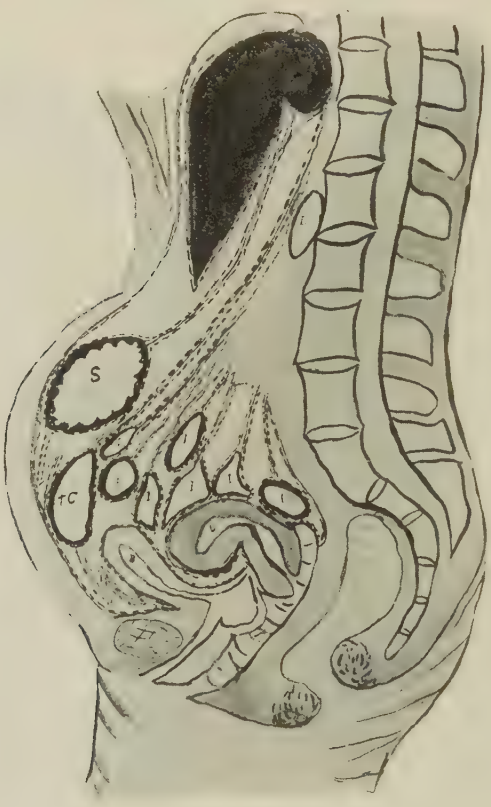

FIG. 8

The whole plan of treatment suggested, one that could be carried out in any school equipped with a gymnasium, is calculated to aggravate the very conditions to which I have just invited attention. My apology for this most excellent author is that the relation of cause and effect that I have demonstrated is only just being taken up and generally recognized by the medical profession at large. Of course, the majority of persons, especially grown persons, who have displacements of the stomach and colon, do not have stoop shoulders and flat chest, for the simple reason that their bony frame was matured and their poise and carriage acquired before their gastro-intestinal displacement.

In conclusion, I wish to emphasize a few practical points:

First: The teacher and, for that matter, the medical inspector, should recognize every case of stoop shoulders and flat chest as presenting possibilities of stomach and intestine displacement. This is especially true when the condition is associated with constipation, headaches, and nervousness.

Second: While the symptoms presented by these cases are sufficiently distinct to enable any competent physician to make a presumptive diagnosis,

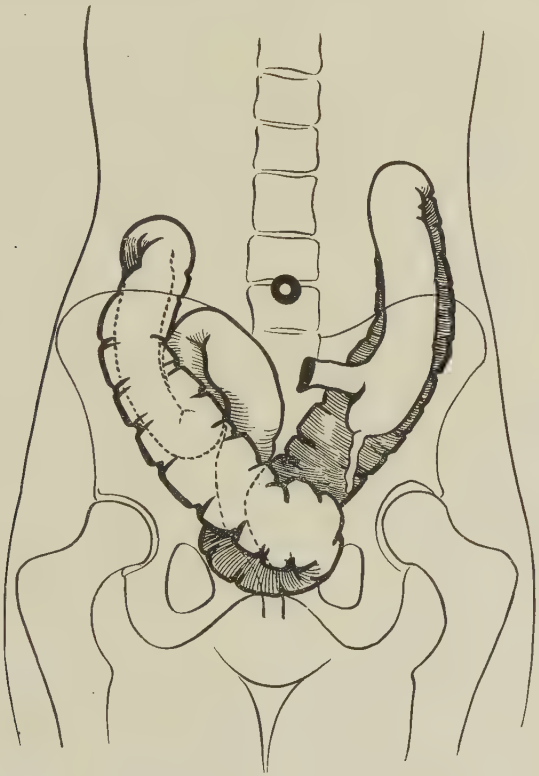

FIG. 9

the X-ray, in the hands of an expert, affords a ready means of making a positive diagnosis. There is no reason why these cases should be left to guess-work and chance.

Third: No course in physical training or other treatment should be prescribed or practiced until this phase of the case has been investigated and a diagnosis arrived at by a competent practitioner of medicine.

ROUND TABLE CONFERENCE

TOPIC: HOW FAR ARE TEACHERS RESPONSIBLE FOR THE MORBIDITY AND MORTALITY OF SCHOOL CHILDREN?

A

I. A. ABT, M.D., PROFESSOR OF PEDIATRICS, NORTHWESTERN UNIVERSITY, CHICAGO, ILL.

Diseases among children of school age would be an interesting subject for inquiry, particularly in such cases where the morbidity was caused or directly influenced by school conditions.

Recent investigations by school physicians in various parts of the world point to the fact that many children who are suffering from some form of disease attend school. For example: some figures taken from Berlin statistics during the school year of 1906–7 show that 34,880 children were examined and of these 3,027, or 8.68 per cent, were excluded from school on account of severe bodily or mental defects. Furthermore, among 8,176 of the children who were examined, 23.43 per cent remained under medical supervision on account of minor diseases or physical defects. The diseases from which the children suffer mostly may be enumerated as follows: general debility, anæmia, rickets, scrofula, tuberculosis of the bones, diseases of the heart, diseases of the nose and throat, diseases of the eyes, of the ears, and curvature of the spine. It is interesting to note that in Strassburg 90 per cent of all school children have defective teeth. It is recognized, too, that carious teeth may lead to infection in neighboring glands and may result in more widespread disease processes. So far as the mortality among children is concerned it is well known that the highest death-rate occurs during the first year. After this time the death-rate diminishes, tho if compared to that of adults, it remains relatively higher. Mortality of childhood reaches the lowest point from the tenth to the fifteenth year. In looking over the causes of death in the various statistical tables which are furnished, we find that the children from the fifth to fifteenth year die in considerable numbers of scarlet fever, measles, diphtheria, croup, whooping-cough, typhoid fever, tuberculosis, pneumonia, diseases of the circulation, and diseases of the digestive tract, including appendicitis. It is a fact that has been long recognized that the acute infectious and contagious diseases among children, in so far as their frequency is concerned, reach the low point during the summer, a period which corresponds with school vacation, and gradually begin to appear after the opening of the school, reaching the high point during the colder portion of the year, when the school is artificially heated and the windows are more or less closed and the ventilation consequently poor. There are many who feel that the school becomes the distributing-point for the acute infectious and contagious diseases. It is necessary, consequently, that school authorities, boards of health, with the co-operation of parents, should guard against the admission of children who are actually sick, and should exclude from school children who come from infected homes.

Teachers are frequently in a position to estimate the health condition of their pupils, whose appearance often indicates the state of their health. Almost every teacher of experience recognizes as an unhealthy pupil the pale, dull child, who almost involuntarily shirks his school work and avoids physical exertion. She can also see at a glance whether the child is suffering from enlarged glands, whether there is a defect of vision, whether the child has a goiter, and she knows, too, how important it is for the hygiene and health of the child and the school that it should come to class with clean skin, clean clothes, and free from offensive odor.

The teacher may also be an important factor in protecting the health of the child, or in preventing disease by insisting on the proper position of the pupil in reading, and particularly while writing, because it is a well-recognized fact that pupils who hold them-

selves in faulty position become short-sighted, or those who stoop become predisposed to pulmonary affections and curvature of the spine.

The hygienic condition of the classroom is not of the least importance, so far as the health of the child and prevention of disease are concerned. The cleanliness of the rooms, their ventilation, the heating and lighting, the position of the children in their seats, the condition of the seats and desks are matters which are too well known to require discussion; nevertheless they are of great importance.

School authorities should interest themselves in the water supply used for drinking purposes. Infectious diseases, such as typhoid and dysentery, are frequently communicated thru drinking water. On the other hand, the drinking-glass should be banished and the bubbling fountain should be substituted in every school. Children when entering the schoolroom should be directed to clean their shoes and remove the street dirt, thus avoiding the contamination of the schoolroom with filth and possibly infection. It would be well to require children with wet feet to change shoes and stockings before entering the classroom.

Much could be done toward improving the sanitation and hygiene of schoolrooms by improving the condition of the floors. Some years ago Dr. Emerson, of Johns Hopkins University, made an investigation of the children's hospitals in Europe. He found that outbreaks of infectious diseases in the hospitals were more common in those institutions which had rough, dust-laden, and worn wooden floors which were difficult or impossible to clean, than in institutions where smooth floors of stone or linoleum were provided. It is well known to sanitarians that materials which collect dust and are difficult or impossible to clean, harbor disease germs, and for this reason the floors of schoolrooms from the standpoint of sanitation require much attention.

The physical and mental health of the school child is frequently influenced by the condition of the nose and throat. Enlarged tonsils, particularly those which are diseased, offer a menace to the child, not only on account of mechanical interference with respiration, but also because these glandular structures are subject to recurrent attacks of inflammation. These attacks may lead to infections in remote parts of the body, not uncommonly producing diseases of the heart and kidneys, and also producing attacks of acute rheumatism which are nearly always of serious import on account of the cardiac complications in childhood. The presence of adenoids and abnormal accumulation of lymphoid tissue in the naso-pharynx causes obstruction of respiration thru the nose and produces secondary symptoms, such as a nasal voice, recurrence of colds, and catarrh, frequently a slow mentality, pallor of the skin, earache or more severe disease of the ear, and deafness. Such children will improve in health and will develop more normally if the obstruction is removed.

Those who are suffering from diseases of the ear usually do poor work. Owing to the pain, purulent discharge, and deafness, they are inattentive, suffer from headache, and the speech is inarticulate.

Defective sight frequently interferes with the progress of children in school. I well remember a strong and well-developed boy who was brought to me because he was doing very poorly at school. His father had moved him from one school to another because of his apparent inability to learn. He was regarded by teachers and companions as half-witted. On more careful examination it was found that he was suffering from lamellar cataract, a condition which probably occurred as a result of nutritional disease during his infancy. Correction of the visual defect and treatment by an oculist produced the most striking change in the mental condition of this boy and his improvement in school work was so marked as to cause surprise to teachers and physician.

So much is expected of the ordinary teacher that it seems almost unfair to ask her to deal with the problem of the nervous child. If we are to make provision for this type of individual in the public school it would seem that we must revise the system of instruction, by providing either separate classes or smaller classes. Many forms of nervousness

present themselves; for example, chorea, or St. Vitus's dance, is a type of disease which not infrequently is a manifestation of rheumatism. The nervousness of these children is often misinterpreted by parents and teachers. They are frequently reprimanded at school and sometimes harshly disciplined at home. These children are frequently irascible, nervous, given to fits of crying, with motor inco-ordination, muscular spasms of various parts of the body. They should be removed from school at the earliest possible moment, kept in bed under the most quiet surroundings, and given skilled medical treatment.

Those who suffer from epilepsy, in either its mild or severe form, should be removed from school and placed in special school homes which should be provided by the state.

There is a group of children whom we designate as nervous children. Frequently they come from neuropathic parents. They may also be spoken of as children with psychopathic constitutions. Very frequently they suffer as a result of environmental conditions. The training has sometimes been neglected by the parents, sometimes been marked by excessive severity, or again by coddling and spoiling. This type of children becomes easily fatigued. In proportion to the degree of fatigue they show various symptoms: loss of memory, inattention, violent outbursts of temper, or excessive hilarity. Some lose all interest, while others are easily frightened and show great fear; others overestimate their mental strength. Another group deprecates itself and underestimates its ability. Many show frequent changes in feeling, while some are excessively sensitive and others are easily elated; a large number show tremor, or coarser twitchings. Disturbances of speech are not infrequent; many speak very rapidly or seem to swallow syllables or stutter. Analogous with these disturbances in speech are disturbances in writing; in some cases the writing is very indistinct, or certain letters are omitted or misplaced.

It has been thought that the infectious diseases, irregular meals, or disturbances in the nutrition and feeding during infancy are factors in the causation of nervousness.

The question of fatigue in relation to the cause and treatment of nervousness among school children is one of widespread importance. While it is generally conceded that every individual is subject to mental as well as physical fatigue, it must be admitted that nervous children are most susceptible. Professor Czerny says that in his experience he does not know of a single case where injury has occurred to a normal child on account of overwork. While this statement may not meet with universal acceptance, nevertheless the following proposition of Czerny will undoubtedly be corroborated by most teachers and physicians. He says all children who seem to have suffered injury from fatigue caused by school work belong to the group of original psychopathics or neuropathics, in whom it may be demonstrated that some neuropathic taint was present before school attendance, probably owing to hereditary conditions and unwise training at home. For excessively nervous children, the school is unsuitable and private or special institutions become necessary. In the milder cases the task is one of correcting the pernicious influences which prevail at home. It is a problem of re-education to teach the little fellow unselfishness, a feeling for the welfare of others, love of truth, and to inculcate in him the knowledge that he has duties to perform to others as well as to himself. Frequently the contact with normal children of the same age, the discipline of the schoolroom, and a strict obedience which has heretofore been unknown are potent factors in the correction of the milder cases.

The management of this class of cases is a fine art. The recognition of the exact condition requires a keen insight into the processes of the human mentality. Its correction demands the most thoughtful guidance; to know how much sympathy, how much severity, how much encouragement to give such a child calls for genius itself. How much school work and how much home work should be assigned without causing fatigue is a problem in education and should be considered individually in every instance and can

be solved only by long experience, patient observation, and intimate knowledge of mind and its making.

Tuberculosis is at the present day a very live subject. Strenuous attempts have been made for the last decade to popularize the knowledge concerning the white plague. It need only be emphasized in this connection that every case of open tuberculosis is a menace to all who come in contact with it. It is only necessary to say that cases of open tuberculosis or florid cases which are characterized by cough and the production of sputum, or by the discharge from tuberculous lesions, which contain the bacillus, should be isolated. Anyone ill with this disease, whether it be teacher or pupil or janitor or sweeper, should be positively excluded from the precincts of the schoolroom and the schoolhouse.

But when all is said and done, perhaps we are asking too much of the teacher; we should go farther. The system of school instruction should consist of more intimate co-operation of the various forces that are interested in the great problem of education, in race betterment and child welfare. It is asking almost too much of the overworked and underpaid teacher that she should assume the responsibilities of parents and supplant the function of the physician. Here there should be the closest co-operation. It would be well if parents obtained clews from the teachers concerning defects or deficiencies in matters pertaining to the school life and education of the child. The school physician and the family physician should give aid and direction in all matters that pertain to the preservation of health, prevention of disease, and in the mental and physical training of school children. If this co-operation could take place the physician would profit because he has much to learn from the teacher and educator; the teacher in turn might gain valuable advice from the medical attendant if he were properly equipped and the advice given in the proper spirit; the parent would benefit frequently because his child would be healthier, and happier, and better prepared for his school work and his life's work.

In summing up, one feels constrained to say that the teacher in the public school is restricted in as far as the prevention of disease, and possibly death, of her pupils is concerned. She cannot easily go beyond the precincts of her schoolroom. Even here the sanitation and hygiene are not altogether within her province. Certainly she has no jurisdiction over the child at home or at play. She will recognize the delicate child, the nervous child, possibly the one with special sense defects or physical ailments. These children she can report to the parents, to the school physician, or to the family physician. When occasion offers, especially in the cases of older children, she can give brief health talks on the dangers which occur from infection, the pernicious effects of tobacco and alcohol, the dangers resulting from insanitary homes, improper feeding, unphysiological manner of eating, the necessity of bathing, the health advantage of cleanliness, and one might continue suggesting almost innumerable topics. But to this, her power to improve the health of the pupils is limited, on account of the very nature of school conditions. While in most cases she will take a personal interest in the health of each individual child, nevertheless it is almost impossible for her to do more than to offer suggestive advice.

In short, it is the prime function of the school-teacher to teach. It is my own opinion that the final responsibility for the morbidity and mortality of school children is in the least part to be assumed by the school-teacher. The relation of the school to morbidity and mortality, if there be such, must be referred to those higher up: to the school system itself, the administrative boards, and the highest officials.

As an outsider, one who is not in live touch with educational problems, I venture to say that the modern tendency which would place everything that would relate to the physical, mental, and moral welfare of a child within the province of the school, is in the line of overtaxing the school with the effect of lightening everyone else's labors and duties. It is sound philosophy to say that we will teach our children to think and to play, rather

than attempt to crowd into a few years all the facts of the universe, for even if we should try, some must be omitted and many will be necessarily forgotten.

Is it not enough that the teacher should instruct in the three R's, in music and drawing, without asking her to specialize in the teaching of morals, the care and feeding of the baby, the hygiene of the home, as well as the school, the chemistry of cooking, the art of sewing, besides being a quasi-physician and an undenominational minister of the gospel? In the meantime the mother is entertaining at the country club, reforming other people's wayward children, organizing large movements for the enfranchisement of women, while the father is plying his vocations and recreations in directions away from the home and schoolhouse. Let us acquit the teacher in almost every instance of being an accomplice to the demon of disease and death.

HOW FAR ARE TEACHERS RESPONSIBLE FOR THE MORBIDITY AND MORTALITY OF SCHOOL CHILDREN?

B

HYMAN COHEN, M.D., ASSISTANT CHIEF, BUREAU MEDICAL INSPECTION, DEPARTMENT OF HEALTH, CHICAGO, ILL.

In order to lend the question greater significance, the term "teachers" must stand not for a collection of individuals exercising an ordinary influence as such; nor even for a class of trained and directed instruments of education. In connection with the subject here discussed, the term teachers must be used in a more comprehensive sense, embracing the individual, in whatever capacity he or she may exercise an influence, as well as the forces directing the exercise of his or her duties. It is not only a question of ascertaining the ability and skill, the acuteness of observation and the degree of interest that the individual teacher may exercise in the early detection of disease, which is the first step in the remedying of the same and one of the important steps in its prevention. It is a question touching upon the training of teachers, their attitude toward such a vital problem, and their willingness and wide-awakeness to join the forces of health conservation. In the final analysis the question concerns itself, not merely with the "teacher behind the child," but also with the authority behind the teacher. Only thus understood can the question be one for profitable discussion.

The morbidity of school children as such falls within the following disease groups:

1. The communicable diseases.
2. Physical defects.
3. Nervous and mental diseases.

With respect to the communicable diseases, it is difficult to say what the relative shares contributed by the school, the home, and the general environment are. It is a well-established fact that nearly all of the contagious diseases show an increased incidence after the opening of school and a marked subsidence after the schools are closed. That the increase and decrease are entirely due to the opening and closing of the schools is questionable. There is good ground for the conviction that other coincidental factors play an important part in this well-known phenomenon. The influences of seasonal changes and the periodic accumulation of a mass of unprotected, disease-inflammable children are certainly important factors. There is no doubt, however, that the school contributes its share, large or small, in spreading the communicable diseases. It is not so much the school, in the indefinite sense of an unfavorable something, as used to be thought and taught, but the personal contact, the mouth-to-mouth and nose-to-nose infection of children, if one may put it so, which large numbers and close intimacy breed. This is particularly true of the three diseases most prevalent among school children, measles, diphtheria, and scarlet fever. Measles is well-nigh uncontrollable on account

of its infectiousness in the early stage before it can be diagnosed. In diphtheria and scarlet fever the onset is usually pretty well marked and no time ought to be lost in excluding such children from school where the disease has escaped the attention of unobservant or careless parents. Also in the two last named diseases the infectiousness or non-infectiousness can be more definitely ascertained before readmission to school. Particularly is this true in the case of diphtheria.

The next large group of diseases, the physical defects and developmental imperfections, are also partly coincident and partly attendant upon school life. I am inclined to think that in this case the influence of school life, regimen, and discipline is not less accountable than in the case of the contagious diseases. Spinal curvatures, anæmia, headache, and lack of vitality due to the usually overheated and ill-ventilated schoolroom are at least in part directly due to school life. On the other hand, there are a host of other defects that are brought out by the physical examination of school children that have no possible relationship to school life as far as their origin is concerned. The third group, that of the nervous and mental diseases: such as chorea, hysteria, and epilepsy, and the less well-defined nervous states produced by fear of examinations, overstrain, and the molding of many minds to one uniform task, can certainly be ascribed, in large part, to school life.

The mortality is considerable in the case of the contagious diseases. What part of it is directly due to school life is, I believe, not possible to tell. In the case of the physical defects and the nervous and mental diseases it isn't a question of mortality but one of vitiated vitality which may, and does eventually, contribute premature deaths to the mortality tables.

What shall we say is the share of the teacher's responsibility in the broadest sense? It is readily apparent that responsibility in this connection must be measured by the degree of preventability. Again, responsibility may be measured not only by the strict adherence to the rules prescribed for detecting and eliminating diseases among school children but also by the willing readiness to push all possible measures for their protection, or, on the other hand, by the failure to take the necessary initiative for the same purpose. The responsibility of the teacher does not end with the execution of orders, with making a number of superficial routine examinations, and with preparing a statistical report. I think it is fair to charge teachers not only with the responsibility of omission but also with that of non-commission—with failure, where it exists, to formulate, agitate, and apply progressive health measures to the problems of school life. The teachers are responsible if they fail to carry out measures prescribed for the health of their charges. The teachers are, in part, not the less responsible for the absence of such health measures where that is the case.

Specifically, the teachers are primarily responsible for the detection of communicable diseases in the classroom both where medical inspection is in existence and still more so where it is non-existent. Whereas the first case of a contagious disease in a classroom may not always be possible of detection, the second crop of cases should always be prevented, and no one's influence, ability, and promptness of action can tell more in a situation of that kind than that of the teacher. It has been proved statistically that many cases of contagious disease are found in school for several days after the onset of the same. A better acquaintance with the early symptoms of the several contagious diseases and closer observation on the part of the teacher would have made it impossible. In the case of physical defects the teacher is to be held responsible, in part, for the co-operation necessary between teacher, physician, and parent to secure correction of defects found. Where no provision for the physical examination of the school children exists, the teacher or the teaching fraternity cannot escape responsibility for its non-existence.

In the case of the nervous and mental diseases the power and influence of the teacher is far greater than it can possibly be over the child's physical state, and hence the teacher's responsibility is naturally greater. Nervous and mental diseases are largely hereditary.

Heredity being accumulated environment, it can be, where unfavorable, considerably modified and improved by favorable surroundings. No one is more potent in this respect than the teacher. The responsibility of teachers is commensurate with their power for good; their power being great, their responsibilities also are great.

HOW FAR ARE TEACHERS RESPONSIBLE FOR THE MORBIDITY AND MORTALITY OF SCHOOL CHILDREN?

C

LINNAEUS N. HINES, SUPERINTENDENT OF SCHOOLS, CRAWFORDSVILLE, IND.

There is an ever-increasing tendency on the part of the public to hand the duties and responsibilities of the parents and the home, toward the children, over to the school. Originally the public school was supposed to give only the rudiments of an education in a few branches. It is a far cry from that earlier day to the present when to the original three R's have been added perhaps a dozen subjects, with more knocking for entrance all the time. In addition to intellectual training, the school in this latter day must look after the moral training of the student and after his physical welfare as well. Never has the world seen such a campaign as there is at present, looking to the preservation of the health of the public. Both expert and layman feel it everywhere. "Swatting the fly" has become a national pastime because people believe that the fly ought to be "swatted." There is a continual national campaign against dirt and disease-producing conditions. The school naturally feels this nation-wide agitation. It is inevitable that the school must respond and do its share. Not only must the conditions surrounding the child in the school be right—the school must go farther and see that the child has the right conditions of living outside the school, so far as that is possible. The teacher, the school doctor, the school nurse, the home visitor must all do their share in seeing that the child is given the best chance possible. In the present scheme of things, the teacher's responsibility is a great one and the tendency is to make it greater all the time. There is a limit to this responsibility of course, but the limit is not well defined. The teacher must do everything possible to preserve the health of those under her care. More than ever before the teacher holds the destiny of the coming generations in her hands.

If the average teacher is asked whether she thinks it is her place to take on added duties in regard to the health of her children, she will probably say that she has all that she can attend to now. She will say that the mental needs of her thirty to sixty children are a big enough burden; that the nervous wear and tear of her accustomed duties are aging her prematurely; that teachers' meetings and examinations, the constant snarling of parents of a certain class over the alleged injustices done their children, and the constant fear of loss of position make her earn her meager salary two or three times over; that the financial vicissitudes incident to trying to make her income cover her necessities with a small margin for the luxuries of life and a still greater margin for the funds that must be saved for old age fill up her measure of responsibility to overflowing. The professional lives of tens of thousands of teachers in this country are summed up in the sentence above. There is much virtue in the defense that the average teacher might make against having more duties thrust upon her. And what is to be done? We are to do the best we can—that is all. Those that do the thinking about school problems of all sorts must continue to blaze the way into the frontier of higher ideals and greater endeavor. The school long ago took up its responsibilities in regard to the mental and moral welfare of the child. There is an insistent demand that the school shall lift to its broad shoulders this new burden. We may complain and say that to add more to the teachers' duties is not fair, is useless, is nonsense, and all that, but the work lies directly

in the path of the school, the public demands that it shall be done, and what the public wants long enough and hard enough it will get. The only thing for the physician, the superintendent, and the school board to do is to lay out plans for this work and ask the teacher to help do it. The only question that remains is as to how much and what the teacher can do.

As one authority (Dr. Ernest Bryant Hoag) says:

> The most natural method of securing proper physical attention to defective school children is thru the teacher.
>
> Whether a school has medical inspection or not, the teacher can accomplish a great deal, and where a medical officer is in general charge he must of necessity depend to a large extent on the teacher's aid if he is to get much done. It is too much to expect one medical officer to properly supervise the physical conditions of six or seven thousand pupils or more, as is often if not usually the case. On the other hand, with the teachers as properly qualified assistants, one medical officer may easily handle a very large number of children.
>
> As things stand then today, practically every city, town, or country district, whether medically inspected or not, finds itself in need of the co-operation of the teacher in matters pertaining to school health.
>
> How then may teachers become either (1) independent health supervisors, or (2) able assistants to school medical officers and nurses? The problem is rather an easy one to solve, and the following plan is now offered as a reasonable solution:
>
> 1. Every teacher before certification should be obliged to give evidence of practical elementary knowledge of the functions of the body.
> 2. Every teacher should be obliged to give evidence of practical knowledge of the ordinary physical defects of children in the schools, which interfere with school progress.
> 3. Every normal school and teachers' college should provide adequate instruction in the lines indicated above. . . . .
> 4. Teachers already certificated should be instructed by properly qualified medical men who are specialists in child hygiene.
>
> In making a health survey the teacher may take her own time. If a survey is made of a room of the average number of twenty to forty pupils in a month or six weeks, it will be quite satisfactory. Any teacher will be able to accomplish this without feeling that she is imposed upon. After a pupil's survey is completed a notice should be sent to the parent in those cases where physical difficulties appear to exist. This notice may be very general and noncommittal in character, and should always be signed by the school nurse and the principal of the school.

All must agree with the thought that in this day, if a teacher is to serve her school in the best way, she must have some training along the line of the detection of physical ailments in her pupils. It is not practicable to have every teacher become an "independent health supervisor" but every teacher can and should have the training that will enable her to be an "able assistant to school medical officers and nurses." In addition to this, every teacher should have the willing, helpful spirit that will make such work easy for her and make it effective as well.

Every school system should have enough medical inspectors to look carefully after the health of every child. There can be no exact number set down as being *the* number one school doctor should look after. Experience in each system must point the way in this matter. The system of inspection should be so organized that every teacher would have her part to do. She can, by her daily observations and by inquiry of the children, find out whenever there is a case that needs attention. She can make reports to the school doctor and to the parents as well. She can do a work that no number of school doctors can do in that she is a mother to her children and is with them constantly. Every effective system of medical inspection must be founded on the skill and willing spirit of the teacher. Hers is a great part in the detection and prevention of disease. And with the detection and prevention of disease, child mortality becomes less and the nation becomes the richer because of the conservation of its coming generations.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Wilbur P. Bowen, Michigan State Normal College.....Ypsilanti, Mich.
Vice-President—George E. Johnson, University of Pittsburgh.....Pittsburgh, Pa.
Secretary—Blanche M. Trilling, University of Wisconsin .....Madison, Wis.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The department met in joint session with the Department of School Patrons. (For program see Department of School Patrons.)

SECOND SESSION—Friday Afternoon, July 12, 1912

The meeting was held in the Ballroom of the Blackstone Hotel, Chicago, Ill., and was called to order at 2:30 P.M. by the president, Wilbur P. Bowen, professor of physical education, Michigan State Normal College, Ypsilanti, Mich.

The general topic of the session was: "Relation of Physical Education to Moral Development."

The following Committee on Nominations was then appointed:

Clayton B. Simmons, director of physical education, State Normal School, Kirksville, Mo.

Mr. Ray, public schools, Cañon City, Colo.

Lillian H. Bruce, Department of Physical Education, Chicago Teachers College, Chicago, Ill.

President Bowen then delivered the opening address on "The Influence of Play Activities on Racial Physique and Morals."

On account of illness, E. B. DeGroot, of the South Park Playgrounds, Chicago, Ill., was unable to present his paper on "What the Public Playground Suggests."

C. S. Hicks, Massachusetts Agricultural College, Amherst, Mass., then presented a paper on "The Influence of Faculty Supervision on the Moral Effects of Athletics in High Schools and Colleges."

The last address on the program, "Athletics an Essential Moral Factor," was delivered by George W. Ehler, professor of physical education, University of Wisconsin, Madison, Wis.

Then followed a discussion of the papers, led by Clayton B. Simmons, director of physical education, State Normal School, Kirksville, Mo.; and participated in by the following: George W. Davis, principal of Hawthorne School, Chicago, Ill.; H. B. Lathe, principal of high school, Ridgeway, Iowa; Miss Shortall, principal of State Training School for Girls, Geneva, Ill.; J. H. McCurdy, director of the Physical Department, International Young Men's Christian Association Training School, Springfield, Mass.; and others whose names it was impossible to procure.

The Committee on Nominations presented the following report:

For *President*—George W. Ehler, professor of physical education, University of Wisconsin, Madison, Wis.

For *Vice-President*—W. E. Day, director of Deseret Gymnasium, Salt Lake City, Utah.

For *Secretary*—Mabel M. Wright, director, physical education for girls, Carl Schurz High School, Chicago, Ill.

The report was accepted and the nominees were declared elected.

The following motion was then made: "That a committee be appointed to consider and frame a report on moral education by means of play and athletics."

This motion was passed and the chairman instructed to appoint the committee.

BLANCHE M. TRILLING, *Secretary*

PAPERS AND DISCUSSIONS

THE INFLUENCE OF PLAY ACTIVITIES ON RACIAL PHYSIQUE AND MORALS

WILBUR P. BOWEN, PROFESSOR OF PHYSICAL EDUCATION, MICHIGAN STATE NORMAL COLLEGE, YPSILANTI, MICH.

We are just beginning to see plainly that play can make or mar physique and character as well as work. Play has always existed, but it has not always done all it might do in the education of the race. The play of children has not always done all it might have done because of lack of opportunity and guidance; the play of adults has not done all it might have done because they choose wrong kinds of play. Here is one of the instances where "wisdom hidden from the wise and prudent has been revealed unto babes." The child chooses his plays by instinct and usually chooses well; his play is an all-round activity of motor, sensory, intellectual, and emotional powers, resulting in balanced development of all these powers. The grown-up looks upon play as a sort of dessert—something useful only to please the taste—and usually chooses ill; his play is organized idleness with a thrill; the more complete the idleness and the more intense the thrill, the more popular it is. The adult secures this combination of idleness and thrill in the automobile, at the ball game, in the ballroom, banquet hall, saloon, gambling-den, or brothel—according to taste and pocket-book. The consequence is that the plays of children are almost universally educative to a high degree and in the best sense, while those of adults more often lead to physical and moral degeneration than to development. It must be admitted that there have been exceptions. It is true that for a short time in the golden age of Grecian history, the play of youth and man alike served as a splendid preparation for war, which was then the chief occupation of a citizen. It is true that for a short time in western Europe, in the days of chivalry, the play activities of knights and squires served the same purpose. Such are but the exceptions that prove the rule. No fact of history is more plainly written than that, as a general rule, the play activities of adults have been destructive rather than helpful; work has built nations and play has destroyed them.

Rome is a familiar example. The citizens of the Roman republic were developed by strenuous work in camp, field, and forum; the result was a

strong type of manhood that not only conquered the world, but represented high ideals of physique and character. When the world had been conquered, and wealth and leisure acquired, it took but a few years of play to reduce the citizens of Rome to helpless and useless degenerates, gifted only in vice and dissipation. History is full of such instances. The world is strewn with ruins that are but the gravestones of races and nations whose history may be summarized alike in a few lines: hard conditions developed vigor and character; these resulted in success, prosperity, power, culture, wealth, and leisure; in the period of wealth and leisure, vicious play activities undermined the physique and character of the people, and absorption or annihilation by a superior people completes the story. War, pestilence, and famine have been called the great scourges of mankind and the chief destroyers of nations, but it is hard to find a case where any of these, or all three combined, have been able wholly to annihilate a nation until its vitality had been sapped by the unwholesome amusements that usually accompany wealth and leisure.

Unwholesome play activities have not only had a large part in the downfall of nations and the extinction of races, but they have also done much to retard primitive races in their advancement toward civilization. It is well known that primitive people, lacking self-control, fall easy victims to the ruinous effects of drug habits and gambling, two forms of play that are popular everywhere. A scientist who investigated the games and amusements of the American Indians for the Smithsonian Institution reports the following incident in the life-history of the red man: Two small friendly tribes in Washington state were observed during an annual festival held by these tribes during the time of our Christmas holidays. One tribe took bag and baggage and canoed thirty miles down the river to the village of the other tribe, where the festivities were to be held. After two days of feasting and idleness, the implements of a simple guessing-game were brought out and all began the favorite play, staking money and property on the winning. This innocent amusement continued day and night for nearly a week, when the home tribe had gained possession of all the belongings of the visiting tribe except their canoes and a scant supply of clothing. A sleet storm came on and in the midst of it the visitors left for home, without paddles to propel their canoes or clothing to keep the less vigorous from freezing. They reached their own village after two days and nights of indescribable suffering to find neither food, fire, nor fuel, and without means of securing any. In spite of all the assistance that the government agents and white settlers in the vicinity could give, the tribe narrowly escaped extinction from cold and starvation; many of them died and all endured great hardship during that winter, which was unusually severe. While this is undoubtedly an extreme instance, it is an illustration of how customs and play habits common among primitive people drive them back to poverty and weakness as soon as they reach a sufficient stage of

prosperity. Drug habits and gambling are well known to be important agencies in the retardation of the Negroes of our southern states from achieving a better physical and moral condition.

Vicious forms of play claim their victims today among our neighbors and acquaintances. When a man or woman goes wrong morally, we usually find that some bad form of play lies at the bottom of the trouble, and when someone goes wrong physically, it is often due to the same cause. When a trusted bank official disappears or commits suicide, it is usually found to be a story beginning with amusements and ending in disaster; that he carried gambling, one of his play habits, into his business and lost his own money and that of others. The courts explain divorces by the legal terms "non-support" and "cruelty," but the real cause of domestic discord underneath these legal phrases is too often some vicious form of play persisted in by one party to the marriage contract. The venereal diseases, now for the first time fully recognized in all their horror, have resulted solely from the so-called "social evil," which is only a polite name for one of the worst forms of play, still exceedingly common among civilized and cultured men. However great the need of improving the working condition of our people, it is plain that there is also a great need of improving their play habits.

Now it may be said that the case has been exaggerated; that the prevailing forms of play among adult Americans are not gambling, drug habits, and sexual vice, but rather reading the newspapers, attending ball games, concerts, moving pictures, and the theater, cards, dancing, and other innocent social pleasures. It is true that the better classes of society have play activities less vicious than those we have been discussing, but the latter are too common even in the best society, and the better forms that are most popular are still to be characterized as "idleness with a thrill"—not one of the common forms of play just mentioned being of a nature calculated to develop a sturdy race of people. It is better for a man to attend a ball game than to drink and gamble in a saloon, providing he does not drink or gamble at the ball game; but to play ball for his amusement is still better. The specialized forms of work we now have demand forms of play better than the non-vicious, idle amusements now universal, if we would save our race from the fate of other races that have played as we do. Sedentary work, or no work, coupled with innocent but idle amusements, has already caused the extinction of many of the best families of our old Anglo-Saxon stock, just as completely as if they had been exterminated by Algonquin savages in the early Colonial days. It is only necessary for the women of our race to become physically weak, to the extent that they no longer are willing and able to bear more than three children to the family, to blot out that race from the people of the earth. This method of extermination is not so spectacular as the methods of Tiglath-Pileser, or Attila the Hun, but it is more effective and really more tragic. Slavs and Semites

and Celts, with a vitality born of the hard conditions of life in the Old World, are today peacefully subduing the races that made this country what it is, by quietly taking the places of these races as they slowly ascend thru the stages of prosperity, culture, wealth, and leisure to the vanishing-point.

Reform of our play habits began many years ago in the attempted suppression of gambling and the social evil by legal prohibition, and is being continued in the wave of legislation now sweeping over the country in the effort to suppress the saloon. Such methods of reform can never be wholly successful alone, for two reasons: first, because they are wholly negative, prohibiting a form of play without doing anything to satisfy the play instinct that led to it; second, because they can do nothing to supplant the play forms that are only mildly harmful or useless, and which are promoted by persons who see in them an easy way to make money. The commercialization of our play that has taken place so rapidly in recent years makes prohibitive and regulative measures necessary and at the same time ineffective, because it pays so well to evade the law. It is practically impossible to suppress even the most vicious form of play by prohibitive measures alone. Just as a thirsty man will drink from a spring he knows is reeking with disease if he can find no other, so men choose vices as amusements, not because they are naturally vicious, but because they crave play and have learned no better form. This is why prohibition so often "does not prohibit."

Right here is where the playground movement, with its active, positive promotion of wholesome plays for both children and youth, is doing what was always lacking. The first and greatest step in reforming the play habits of a people is to teach them early a wide range of good forms of play. Such play is more fun to a normal person than vice, when he has learned to play well. By thus adding competitive measures to prohibitive ones, the play habits of the race may be greatly improved.

Besides teaching better forms of play, and so improving the tone of popular pleasures, the playground is a good place to teach moral principles. It may be true, as the psychologists teach us, that conduct results from ideas, and that if we will implant a moral idea in the mind of a child, we may take for granted that it will work itself out in conduct and character, but I doubt it, if we are to consider the child as having the idea when he can recite it to us. The school child has been trained in the art of reciting and does not practice as well as he is able to preach. This is true in all lines of study. For example, in a course I give in the teaching of school gymnastics, I find that almost any one of a class of fifty students can describe fluently how a certain exercise should be taught and discuss the theory underlying it quite thoroly; but when I ask one of them to do it, not more than one or two out of the fifty can do it as all agree it should be done, until they have had practice and training in doing it. Study,

discussion, and practice are all needed properly to implant the idea. In the words of the old maxim, "Things to be done must be learned by doing them," and this applies to conduct and the teaching of morals as well as anywhere.

For this reason, I believe that the course of moral education outlined and published last year by a committee from the National Council of Education is deficient, in not making a definite use of the play life of the pupils as a means of moral instruction, above the second grade. It is in the competitive plays of grammar- and high-school pupils that moral principles are most plainly involved, and these plays should be used in connection with the moral lessons outlined. Questions of conduct arising in the games they practice on the playground will be discussed with more interest and profit, in my opinion, than the conduct of characters in history or fiction. Let the members of a team discuss with the teacher such questions as these: What is gained and what is lost by winning unfairly? Should we play unfairly in self-defense if we think our opponents are doing so? Why? How far should the spectators go in aiding the home team? Shall we object to the decisions of the umpire in hope of making him favor us?

Our high schools and colleges are using athletic sports as a means of physical training, but few of them realize the possibilities for moral training these sports afford, and in many cases the players are left to pick up such moral principles and habits of conduct as they may chance to get from spectators and from professional coaches employed to put out a winning team. Of what trivial import is the championship of a state or the success of American athletes in the Olympic contests compared with the higher grade of moral character that might be fostered if the educators of the country would unite in using the physical sports and games as a laboratory for training in that direction?

Are the experts in playground instruction prepared to outline such a course in moral training and instruction? If so, they should do it at once. I suggest that a committee be named in this meeting to prepare such a course as a supplement to that given by the committee of the National Council.

THE INFLUENCE OF FACULTY SUPERVISION ON THE MORAL EFFECTS OF ATHLETICS IN HIGH SCHOOLS AND COLLEGES

C. S. HICKS, MASSACHUSETTS AGRICULTURAL COLLEGE, AMHERST, MASS.

This topic brings us face to face with the fact that there has been an activity developing in our educational institutions, which has not been recognized and developed by the faculties as a part of the training for the student. This activity has grown from small beginnings until today college and preparatory-school faculties are compelled to consider the

wisdom of refusing to recognize it as a legitimate function of the institution, or accept and control it. The attitude of the majority of institutions for many years was the first named; that is, they did not consider the athletic activities as in any way associated with the education of the student; therefore, why should they be recognized?

The purpose of education today is in a great measure directed to the making of good citizens. To do this there must be a three-sided development of the student, that is, the mental, the moral, and the physical. Athletics, when pursued with moderation, to a great degree solves the problem of physical development. It also becomes the laboratory where many of the good and bad traits of character are acquired—therefore its office in the moral training of the student. We hear the statement that this school is a poor loser or a good one; a player is a gentleman or a "mucker." Take the same individuals under almost any other circumstances, and they would all be classed as gentlemen. In the excitement of physical contest, men act and appear as they really are, and not as they assume to be. The athletic field is the great common ground where every man proves his merit or worthlessness. It is the final analysis of character, and he succeeds or fails because of what he really is. Therefore, is it wise for faculties to refuse to superintend the athletics of their schools? Are they not blasting one of the most fertile fields for moral training?

Fifty years ago the athletic games in our schools and colleges were very few. The boys played baseball, but every school had its own rule. There were no organized teams to play with other schools. A few games were played between schools, but a team was chosen for each occasion. There were no hired coaches, training-tables, or expensive outfits for players. Stadia and athletic fields were unknown. They played on the most convenient vacant lot, much as the small boy does today. Now, we must acknowledge that things have changed.

Today a school is considered poor that does not have a student athletic association organized to support teams to play with rival teams in each of the several sports. Members of the teams are supplied with outfits which are made for them, and have their expenses paid to travel to other schools and play. Our universities have built great athletic fields costing thousands of dollars. Their receipts from a season's sport, in many cases, amount to several thousand dollars. Players on these teams, many of them boys who have never enjoyed luxuries, have more money spent upon them than they have ever seen before. Is there any chance that this player will get a wrong estimate of values in his college course?

Who is the business head controlling the expenditure of this money? In many cases it is a boy whose own father, if he is in business, would not consider him as having judgment to do business for him. This is the case of the student manager, with plenty of money to spend, money that

is not his own; and no one asks why or where it is to be spent. Is this a normal training for the young man? Is it not possible that he may find it easy to use some of this money for his own purposes? Further than this, the student manager carries on business correspondence with other institutions, arranging his schedules of games, making contracts amounting to hundreds of dollars, buys supplies, and does all this with but the training and ability of a boy. Is there anything absurd about this? He is certainly given too much responsibility without experience. Nearly every student manager means well and does the best possible. They are as fine a group of boys as any that we can select, but we cannot give them experience and business ability. Their acts are too easily influenced by fellow-students. They have control of but one season's sport, and therefore give too much attention to temporary advantage. The selection of officials for games is too often made for the immediate advantage to be gained. This, in many cases, works greatly to the detriment of their own institution in following seasons.

In contrast with this unsupervised condition of student management, I wish to state the case of the director of athletics, a member of the faculty, or the graduate manager. This office has been created in the majority of cases as a result of the activity of the national collegiate athletic association. They have stated the case as follows: "The colleges and universities enrolled in this association severally agree to take control of student athletic sports, as far as may be necessary, to maintain in them a high standard of personal honor, eligibility, and fair play, and to remedy whatever abuses may exist."

The head masters of many of our preparatory schools and presidents of colleges are alive to existing conditions and the resulting evils. The solution which they have made is the recognition of athletics as a part of the college and school training and the creation of the office of either director of athletics or general or graduate manager of athletics.

The qualifications of a person for this office are in many ways quite different from those for other college and school offices. He must be a man with general knowledge of the sports and their needs, with high ideals as to sportsmanship, easily approached by the students, but firm in his control of the situation. In many cases the graduate manager has filled the position better than any other officer because of his undergraduate experience in that particular institution.

In speaking of the student manager and his work, I stated that he was given too great a responsibility with little or no experience. I do not believe that the manager of athletics should come in and take upon himself all the duties of the several student managers. He should be in close touch with all of their work, to assist and advise. He should make the student managers feel that it is co-operation and not absolute direction. Then he is sure to obtain their support and confidence. Under these

conditions the student managership means a business training to the student.

The relations of colleges and schools, whether friendly or otherwise, are in a great measure determined by their athletic relations. When the arrangement of contests and the selection of officials is left to men who are above the influence of excited undergraduate opinion, the matter is simple and fair to all parties concerned. It is here that I feel that the director can do the most for the improvement of sports.

To support this I wish to relate the following case: In a football game between two large colleges, one team scored upon the other by a field goal. The ball struck the ground before going over the goal and the decision was questioned, but allowed to pass, and the game was won by it. The management of the college which lost by this decision insists that the same official must referee the game between the two institutions next autumn. They realize that the official decided as he believed was right, and they are strong enough to insist upon the retaining of such an official. Would a student manager, influenced by undergraduate judgment, sustain an official who had caused his team to lose? He could not if he would. From my own experience I can say that many of the misunderstandings between student managers are over the most trivial points. By taking matters of this kind entirely out of their hands, I have cleared up these cases with little or no trouble, and the students soon forgot their grievance.

In speaking of the athletic director and the general or graduate manager, I have spoken in favor of either of these as compared to the student manager. In doing this I have thought more particularly of the condition in our colleges and universities. In the preparatory and the high schools, I believe there should be one man as director of athletics, who has charge of both the management and actual play of the boys: this athletic director to be a member of the school faculty and in complete accord with the policies of his institution. More particularly is this true for schools than for colleges, for here you find students far too immature to attempt to manage teams.

A game of baseball between two public high schools of one of our eastern cities was visited. The whole arrangement of the game on the part of both institutions was in the hands of students. Faculty supervision was not evident upon the field. About the middle of the game the umpire was insulted by a player, and before the close of the contest the police were compelled to act. The masters of the schools were consulted and they stated that they had not as yet decided to interfere with the boys in their games. This is only one instance of a very bad condition of affairs among some of our public high schools.

The New England College Conference on Athletics has appointed a committee to endeavor to arouse those who are at the head of our public schools and show them the necessity of controlling the athletics. At the

last meeting of this society it also gave much time to the consideration of the systems of management in the several New England colleges. At the present time five New England colleges have graduate or general managers of athletics, while in fourteen, students managers are conducting all of their business. Many of the colleges in the last-named group realize the necessity of changing their system of management, but fail in that they cannot afford to support an officer for this purpose.

The difference in the business conditions where the student manager is in power, and where the general or graduate manager has been in power, is conclusively shown by the attitude of the manufacturers who sell athletic goods. The five colleges having graduate managers pay most if not all their bills within the ten-day discount period, while at least one of the other colleges cannot buy goods from certain firms except for cash and several of them have bills that have been running for several years.

In this paper I have attempted to show the conditions as they exist in many schools and colleges and how these conditions work, both directly and indirectly, harm to the institutions and their individual students; that the presence of an older person in control removed many of these conditions and introduced influences for good.

I hope that I may be pardoned for drawing most of my illustrations from one part of the country. I feel, however, that New England is far from being progressive in this matter, and we have much to learn from the organizations of the West, and especially of the Missouri Valley Conference and similar associations.

The place for athletics in the school and college is secondary; however, it cannot be ignored, but must be handled with tact. Give athletics full recognition as one of the activities of the institution and control it so as to set the student right as to its values and the relation which it bears to other parts of his education.

ATHLETICS AN ESSENTIAL MORAL FACTOR

GEORGE W. EHLER, PROFESSOR OF PHYSICAL EDUCATION,
UNIVERSITY OF WISCONSIN, MADISON, WIS.

[*Abstract*]

Moral education to most people means the presentation to boys and girls by teaching and preaching the precepts and maxims of a moral or ethical or religious code of conduct, the exhortation to act in accordance with such a code, and the leading of an exemplary life by the teacher and preacher. This is good as far as it goes. In most cases it fails at the point of application—the practice of moral and ethical principles in the real life of the boys and girls.

The boy and girl in the school or the home are under authority—what they may or may not do here is determined for them—they act as they must, not as they will. Strong character was never the product of imposed restraint and repression or prohibition.

The real life of the child or youth from his point of view is the one that he lives out with his fellows. Here he is free to pick and choose, to determine for himself what he will or will not do, swayed by his own deepest feelings and sentiments, influenced by those of his own kind—his gang.

The character of the boy is determined most largely by the habits and ideals that are prevalent among those with whom he associates, the environment of his real life. Here is where he goes wrong or works out his own salvation.

It is in the activities of this free life of play and thru the associations and relationships that are here formed, that fundamental virtues or vices get their grip upon mind and heart.

At the period when the shackles of home and school begin to bear heaviest upon the boy, and his instincts to lead his own life and develop his own character tend to drive him out into the world of his own kind, we find competitive play—athletics in its many forms—to be his dominant interest. This form of activity presents daily innumerable opportunities for the practice of the precepts and maxims that home and school have taught. If the environment is favorable, the reactions tend to the establishment of right habits of thought and action. If the environment is unfavorable, anti-social, unethical, and immoral habits are the result.

The environment is determined by the character of the leadership supplied. At the time when every other activity of the child or youth is subjected to some form of adult supervision with a view to constructive guidance and helpfulness, only a police supervision is provided for this real life, and that in accord with a policy of repression and prohibition. Under this policy we see juvenile delinquency, misdemeanor, and crime steadily increasing.

Where opportunity is given the boys of a community to live out their real lives as expressed in competitive play—athletics, under a wise leadership that drives home the lessons of right and wrong at the psychological moment of their occurrence in practice—juvenile delinquency, misdemeanor, and crime decrease.

Athletics provides for an expression of youthful instinct and interest that is vital to the development of character. It is an essential factor in any scheme of moral education.

DEPARTMENT OF SCIENCE INSTRUCTION

SECRETARY'S MINUTES

OFFICERS

President—DAVID STARR JORDAN, president, Leland Stanford Junior University, Stanford University, Cal.
Vice-President—WILLIAM ORR, deputy commissioner of education.....Boston, Mass.
Secretary—H. L. TERRY, state high school inspector.....Madison, Wis.

FIRST SESSION—TUESDAY AFTERNOON, JULY 9, 1912

The meeting was called to order by David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal., who gave the president's address.

William A. McKeever, State Agricultural College, Manhattan, Kans., then gave an address on "Eugenics."

A paper on "A Psychological Classification of Public-School Pupils" was presented by George E. Dawson, director of Department of Child Study, Henry Barnard School, Hartford, Conn.

The meeting then adjourned.

SECOND SESSION—THURSDAY AFTERNOON, JULY 11, 1912

The meeting was called to order at 2:30 P.M.

The following nominating committee was appointed:

Louis P. Jocelyn, teacher of mathematics, Ann Arbor High School, Ann Arbor, Mich.
F. W. Plapp, assistant in Carl Schurz High School, Chicago, Ill.
Maximillian Braam, teacher of biology, Hughes High School, Cincinnati, Ohio.

Lewis P. Allyn, State Normal School, Westfield, Mass., presented a paper with illustrative material on the topic, "Communal Chemistry: How May the Teaching of Chemistry Promote the Well-Being of the Community?"

The subject was continued by J. F. Snell, professor of chemistry, Macdonald College, Ste. Anne de Bellevue, Quebec, Canada, who read a paper on "Chemistry and Household Science."

A paper on "Applied Botany" was then given by George A. Works, instructor in agricultural education, University of Wisconsin, Madison, Wis.

J. A. Randall, Pratt Institute, Brooklyn, N.Y., presented a paper on "Physics and the Equipment Problem."

"A Study in Adolescent Efficiency" was presented by J. H. McCurdy, director of the Physical Department, International Y.M.C.A. Training School, Springfield, Mass.

A general discussion followed the reading of this paper.

In connection with the consideration of the topic "Physics and the Equipment Problem," the following resolution was moved by William A. Wirt, superintendent of public schools, Gary, Ind.

Resolved, That the Joint Committee on the Improvement of Physics Teaching, now extant, appointed by the National Federation of Science and Mathematics Teachers, be recognized as a committee of the Science Department of the National Education

Association, and that the Science Department recommend to the Council an appropriation of funds to enable the committee to carry on its work.

This motion was seconded and carried.

The report of the Committee on Nominations was as follows:

For *President*—H. L. Terry, state high school inspector, Madison, Wis.
For *Vice-President*—John F. Woodhull, professor of physical science, Teachers College, Columbia University, New York, N.Y.
For *Secretary*—Jesse L. Smith, superintendent of schools, Highland Park, Ill.

The report of the nominating committee was unanimously accepted.

H. L. TERRY, *Secretary*

PAPERS AND DISCUSSIONS

PRESIDENT'S ADDRESS

DAVID STARR JORDAN, PRESIDENT, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

Goethe says, "It is a wise provision of nature that trees shall not grow up into the sky."

This applies to the world at large, but there are two parts of the world where the limit is off and the trees grow as they will. One of these is in southeastern Australia on the mountain called the Blacks' Spur. There the giant eucalyptus trees reach a diameter of forty feet and a height of nearly three hundred.

In California, along the flanks of the Sierra Nevada, about half-way up grows the giant tree *Sequoia gigantea*. There are a dozen or more small groves of this tree, the largest of the trees being forty feet in diameter. The tree is rather low and chunky; not over about one hundred and fifty feet high. In one case it is found more convenient to run the stage road right thru between the breaks in the roots in one great tree, than to go all the way around it.

People of the East believe everything of California except what is true. For example, when I told the story that when a great tree fell in the Mariposa Forest the echoes were heard for six weeks, there were some who thought it incredible.

There are a dozen or more of these small groves. Usually there are no young trees because the leaves have been piled up for ages so that no seedling can reach down to the ground. In one place only there are little trees five to ten feet thru, where a stream has washed away the accumulated leaves and the seeds have had a chance to sprout.

Most of these forests are now government parks. The Calaveras Grove, the first discovered and the best known, has just been, or is about to be, taken over out of private hands. I visited one of the finest of these groves, the Converse Basin in Tulare county, when the great trees were

being cut up to make little wooden soap-boxes. The wood—pink in color and brittle—is not very good for lumber as it is easily marred.

In the Converse Basin the trees had to be cut down by dynamite blast, as no saw would go thru them. They had to be blasted in pieces before they would go into the saw-mill. I counted the rings in one little tree; it was six feet thru at the time of the fall of Rome and there were about 1,950 rings in all. There were other trees with apparently four times as many rings but I couldn't count them—they were too high when they lay on the ground, and the outermost rings in these trees are very narrow. If the world is 5,000 years old, these trees must have been there at least some years before the world was made—perhaps created by some other deity. Mr. Converse, who discovered this basin, claims to have counted 11,000 rings, but we will be satisfied to say 5,000, which is probably nearer the truth.

This little forest, once destroyed, cannot be grown again; it would take another 5,000 years to do it. Meanwhile, they have turned in the sheep, called by John Muir the "human grasshopper"; they nip off every green thing—only the grown trees and rocks escape.

Another famous tree in California is the sugar-pine, very tall and straight, and often ten or twelve feet thru. The botanist Douglass, who discovered it, said that beyond a doubt it is the noblest of all vegetables. The big tree grows only in the high Sierras, about half-way up.

In the mountains of the Coast Range is the great redwood *Sequoia sempervirens*. This is a smaller and more slender tree, the oldest not over 2,000 years old; the largest about twenty feet thru and two hundred and fifty feet high. Some of the most splendid forests in the world are those of the redwoods. There is a belt over one hundred miles long and about twenty miles wide in the northwestern part of California, running from Cape Mendocino northward. The railroad is being built thru this region and the whole forest has passed into the hands of lumbermen. Soon it will all be gone and our children will never know what a real forest is like. In Pennsylvania, they call it forestry to cut down a pine tree, and a man at each end takes hold of the trunk and carries it away. This is more like weeding a garden than it is like the work in the real forests.

In Santa Cruz county the state has bought a park of 2,500 acres of these great redwoods—the so-called Big Basin. This was a splendid thing to do but we need more such parks.

William Kent gave the Muir Park of redwoods on the north side of Mount Tamalpais to the state. President Roosevelt wanted to call it Kent Park but Mr. Kent said he had a number of sturdy boys and if they couldn't make the name of Kent known in some way he was willing to let it drop into oblivion.

A movement is taking shape to urge the United States government to condemn or buy a certain part of this Mendocino Humboldt Forest.

The railroad will make it accessible and there can be no finer pleasuring-ground in the world. We hope that all teachers, in such degree as may be possible, will lend their support to this movement and to every movement everywhere to save the trees.

EUGENICS

WILLIAM A. McKEEVER, PROFESSOR OF PHILOSOPHY, STATE AGRICULTURAL COLLEGE, MANHATTAN, KANS.

Within the present century the problem of human race-breeding has become one of world-wide interest. At last, after centuries of intensive study of the many less closely related problems, man has shown a willingness to apply the exact methods of science to a study of his own inherent nature. The conclusions of this new type of research are only beginning to make their values apparent, but the next few years in the future seem to promise some data of far-reaching importance to the trend of human development.

WHAT WE ALREADY KNOW

So far, the careful researches carried on in the field of eugenics have made a number of matters fairly clear, and thus paved the way for a more aggressive campaign of inquiry. The conclusions with reference to the nature of man thus far seemingly established are these: that as an animal man belongs in the general scale of animal life; that as such the principles of biology and evolution apply to him very much as they do to the other, especially the higher, animal forms; that inborn physical, and most probably mental, characteristics in man are transmitted from parent to child in accordance with the Mendelian law of distribution; that many forms of disease are transmissible in a sense that the offspring of the affiliated parent probably inherits a certain degree of weakened resistance to the encroachment of the disease in question, or that the child lacks a so-called "determiner" for the missing or impaired quality.

WHAT WE DO NOT KNOW

On the other hand, we are still much at sea as regards a clear distinction between acquired and congenital characters. While the question of the inheritance of acquired characters is a more unsettled one than it was a decade ago, there are probably more able biologic scientists today who believe in the transmission of acquired characters than there have been at any other time during the period just named.

We are still more in the dark in regard to the respective values of nature and nurture as factors in the development of a substantial human life, if—barring a comparatively few misfits—we draw our parent stock from the great common race stream. Even less are we informed as to the

potency of mind as an agency in transforming mere unpromising human animalism into transcendental spirit power.

SOME PRESENT METHODS CRITICIZED

The London school of eugenists, "biometricians," are proceeding chiefly under the rôle of pathologists and psychiatrists—they are out in the field searching for degenerates in the form of sick bodies and degenerate minds, and they are meeting with marked success in finding what they are looking for. They are out with the assumption that mankind is sharply divided up into stocks—that there are a very few of the better stocks and a very large number of the worse or weaker stocks. They go among the families of Oxford graduates and others who have been favored with full physical and mental nurture as well as with the powerful stimulus of hope and expectancy, and take some measurements. These mathematical eugenists then lay their yard-stick upon the members of the peasantry, men and women who have been bruised and beaten and half-starved thru the workings of an iniquitous caste system fastened upon their ancestry generations ago by the bloody hand of conquest; and lo! the children of the "better" stocks are proved to be the ones to breed from! They make a much superior showing as compared with the others!

Our American Eugenics Laboratory, at Cold Springs Harbor, N.Y., is doing a much more promising work, altho its pioneer efforts are of necessity confined largely to a study of the morbid and the unusual aspects of our common citizenship. And so I contend that eugenics is much in need of a broad, comprehensive definition of method and that its most important task just now is that of transforming age-long tradition and popular prejudice into an intelligent conception of the world-wide race-breeding problem. The common-school teachers, as yet, are not acquainted with the principles of animal breeding which underlie those human developments. They especially lack a system of methods and aims looking forward toward a higher human brotherhood.

WHAT IS MAN?

What is the general nature of the human race today? Is it one or many? Is it made up of distinctive, separate strains and "stocks," destined to remain permanently segregated into castes and factions, which must forever be at war one with the other? Or is our common human nature, wherever found on the earth, essentially a unit out of which may be made to emerge a beautiful social democracy? This is the most momentous question of the ages—a very pressing problem alike for all who are either directly or indirectly interested in the life of man on the earth. I contend with all my might for the latter position. The historian, the paleontologist, the biologist, the natural scientist, and the psychologist

are all contributing a mass of evidence to support the theory that there is only one human-kind the world over; that the various so-called races of man have had a common origin, and are inherently shaped for a common destiny; that the great age-long instinctive qualities upon which our best civilization is built are found alike and in abundance in every tribe and nation under the sun; that the great central stream of humanity everywhere found is prepotent at birth in all the qualities necessary for development, under favorable conditions, into sound and substantial manhood and womanhood; that human-kind everywhere is apparently on the way to a common higher physical and mental being.

THE COMMON RACE INSTINCTS

What are the human instincts, which are found abundantly in the human young everywhere, and which furnish a substantial foundation upon which to build a beautiful and sublime superstructure of manhood and womanhood? They are these: an instinct—

1. to satisfy the animal appetites and desires;
2. to participate in play and other recreative experiences;
3. to contend for the individual and the social well-being;
4. to accumulate property and carry on commerce;
5. to institute some kind of family life and rear children;
6. to build up a community life and enjoy good fellowship;
7. to institute civil laws and customs aiming at social justice;
8. to seek a form of religious experience applicable both to the present and to an ideal future life.

Once accept the point of view that the human race is a unit; that it is substantially sound in the main; that the foregoing basic qualities are a common inheritance, and then we are ready to come forward with a constructive program. The detailed work of rebuilding a race will call for a scheme of training for parenthood, beginning with the mere child and leading on with ever-widening knowledge to the time of marriage. Such plain matters as the choice of a life-mate, the care and direction of the lives of the children in the home, the organization of all the interests centering in the household and making up a substantial family life—these and others like them teachers must know as well as they now know the common-school branches, and they must teach these matters to the young as a direct means of race improvement.

THE PERENNIAL WAR CLOUD

The greatest menace to the establishment of a mighty spiritual democracy among the men of all nations is the professional militarism that has slowly grown into a monster of impending power and destructiveness. Thrones and palaces of the older sort are tottering, monarchies are crumbling before the onward march of the enlightened masses, but much of the same old selfishness and lust for power is now lurking behind the frowning breastworks of an aristocratic militarism, and that under the pretense of patriotism.

So the student of eugenics is halted here at the outposts of the great armies and navies of the world. The war problem must be settled before we will be able to make any very substantial advance. If the militarist be right, then human life is a cheap and bloody piece of animalism at best, and the nations must keep on cutting one another to pieces for the sake of mere brute supremacy. If the military aristocracy be right, then man must ever continue in chains of bondage to his fellow-man and the task of the eugenist is merely that of determining how to breed better fighting qualities in men.

Mark you, I do not stop with the most damaging charge that the enormous expense of militarism is sapping the life-blood out of the nations of the earth, altho this fact is already clear to all thinking minds. I add the most serious charge that militarism as organized at present is a hard and brutish aristocracy—that it is built on the principle that man is predominantly fierce and selfish; that the goods of the world are material goods; that only a few, the greatest in war, can expect to obtain possession of these goods; that the great mass of men are unfit for self-direction and must act only in mute submissiveness to the stern and supercilious command of a superior; that man's social sympathy and his spiritual nature are mere playthings to be made use of only in times of peace.

THE CHURCHES AT FAULT

Again I charge that some of the religious bodies are standing directly in the way of a comprehensive eugenics program thru their attack upon other denominations. For example, there is a periodical with a circulation of about 150,000 copies published by the Protestants for the sole purpose of attacking and defaming the Catholics. Such methods are doing much to foster religious prejudice and hatred among friends and neighbors and to destroy the effectiveness of two great religious bodies which might as well be working side by side on terms of good-fellowship for the spiritual uplift of the race. As a regular Protestant church member I wish to denounce this poisonous, peace-destroying campaign as a twin brother to the militarism hitherto described.

But there are those among us who see a divine spark of life in all races and individuals among men. We see a great cosmic brotherhood slowly emerging. We behold a great throng of the common people arising to assume the reins of their own government. There is no wealth but spiritual life. There is no power save divine power, and common man is its chief instrumentality! Let those who would go about seeking the breaks and the bruises on the outer margins of our human nature turn their lamp of inquiry into the great heart of our common humanity and find there all the substantial elements of worth and ability necessary for unfoldment into splendid and beautiful character. Let them seek to provide for our great common childhood all the physical nurture, all the play and social

intercourse, all the work and industry, all the religious experience, all the vocational and economic discipline, for which human instinct the world over so loudly calls. Let them provide that practically every young person shall find a place to live and work wherein his best latent powers will be called into service and where the light of hope and faith may shine on undimmed unto the end of life.

A SUMMING UP

Let us summarize the discussion. My contention follows:

1. We must have a more comprehensive scheme for our eugenics program, taking into account the substantial unity and solidarity of the whole race as pointed out by the common instinctive dispositions potentially present in all the human young.

2. We must provide that all the teaching forces—the school teachers, the ministers, and the popular and educational writers, shall be made acquainted with the facts of inheritance and the great possibilities of a rightly ordered environment as an agency for transforming crude animalism into human characters of spiritual supremacy.

3. While it is true that there are a few insane, imbecile, and otherwise weak and degenerate human beings among us, I challenge the "biometricians" to show under fair considerations that the great central stream of humanity is other than good and comparatively sound "man-stuff" at birth—a raw material out of which adequate training can bring all needed perfection of character.

4. Finally, education as an ally of eugenics must enter aggressively a comparatively untried field. That is, it must try out a more definite plan for making the mind of man supreme over his physical nature—so train the young all along the way that he shall become master over all hurtful physical appetites, and that his physical well-being shall have the advantage of the powerful healing agency of a mind stimulated by joy and social sympathy and hope of the future. I must be understood in this matter, if nowhere else: I mean that when we learn how to bring out by a well-rounded course of training the best inherent mind activities of our common man nearly all the sore sports and inherent sickness now found in him by the "biometricians" will disappear under the magical therapeutic power of a divinely supreme mind. Much of the disease found among the so-called lower class is a sickness brought on by such things as undeveloped mind power and lowered vitality thru ignorant dissipation and ill care of the health, as lack of the healing agency of the daily practice of love and hope and a broad human sympathy.

A PSYCHOLOGICAL CLASSIFICATION OF PUBLIC-SCHOOL PUPILS

GEORGE E. DAWSON, DIRECTOR, DEPARTMENT OF CHILD STUDY, HENRY BARNARD SCHOOL, HARTFORD, CONN.

The facts and inferences presented in this paper have been derived from a study that is still uncompleted. They are therefore not to be regarded as conclusive. The study, which has extended over the greater part of four school years, includes a rather detailed investigation of the mental processes of some two hundred children and youth. One hundred and five of these have been children in the elementary schools; fifty have been either high-school pupils, or of high-school grade of work; and fifty have been graduate students in professional schools.

I shall submit at the outset a summary of my results, which constitutes the thesis of this paper, and shall then attempt to give a brief description of the study itself. Broadly considered, I have found two classes of pupils in the public schools. First, there is a type of mind that learns essentially thru objective experience. This mind has difficulty in learning, or in using, words, mathematical signs, or other symbols, detached from their proper objects. It has no difficulty, however, in learning objects themselves, or in thinking in objects, or in controlling objective experience. Nor has it any difficulty in learning and using words, mathematical signs, and other symbols that are associated with objects. But as soon as these symbols are presented to it unrelated to objective experience, it fails to perceive them readily, to remember them accurately, and to build up the resulting detached symbolic associations. In contrast with this type of mind, there is another that can learn symbols quite detached from their objects, and can thus make symbolic experience a primary fact of consciousness, instead of a secondary, and dependent fact, as is the case with the first type of mind. This mind thus has the power of substituting symbols for their proper objects. That is, instead of verbal and other symbolic mental images being dependent upon the mental images of objects, they are more or less completely dissociated from the latter. This mind can perceive symbols and remember them as such, and can build up symbolic mental associations having no immediate relationship with objective experience. These two types of mind may be called "objective" and "symbolic," respectively.

The differential qualities that I have found to underlie and condition these somewhat sharply contrasted types of mental organization may be stated, in general terms, as follows: The fundamental and all-comprehending distinction is the degree of completeness in the relationship between the mind of the pupil and the objective world. That is to say, the pupils that are well adjusted to objects, thru normal sense-experience and adequate motor activities, tend to be objective-minded. On the other hand, the

pupils that, for any reason, have their sense-experience curtailed, or, more particularly, have incomplete motor experience, tend to be symbolic-minded. Thus, robust vitality, well-balanced nervous and muscular systems, and normal sense-organs favor objective-mindedness; while any impairment of vitality, and any incomplete functioning, in either the sensory or the motor sphere, favor symbolic-mindedness. It would seem, in general, that where a child is less perfectly adapted for objective experience he tends to develop a compensatory power of symbolizing such objective experience, and making the symbols the immediate objects of his interests and his efforts. In other words, the primary distinction between the objective type of mind and the symbolic type of mind appears to be a biological quality rather than a psychological quality; that is, the quality of more or less complete interaction between the individual and his environment.[1]

However, the differential quality that is most pertinent to our present interest is psychological, and is found in the relationship existing in the pupil's mind between object-perceptions and symbol-perceptions; object-images and symbol-images; and object-thinking and symbol-thinking. The objective mind starts, in these different mental processes, with objective experience, and proceeds thence to symbols and back again to objective experience. Or, if symbolic experience be presented to it as the initial stimulus, the memory-images of the corresponding objective experience are at once evoked, and become the controlling factors in the mental process. That is to say, the mental processes of the objective mind begin and end in the objective world. Words, mathematical signs, and other symbols are simply media in the mental cycle. The symbolic mind, on the other hand, appears to have the power of perceiving symbols, forming mental images of symbols, and thinking in symbols, without either the objects or the memory-images of the objects for which these symbols primarily stand. In other words, the mental processes of the symbolic mind may be circumscribed by the symbols themselves, and have little or nothing to do with the objects for which the symbols properly stand.

The tests I have used to determine this differential quality of mind are not so complete as I hope ultimately to make them. They are, however, I believe, significant tests. For objective mental processes, I use the following: (1) tests of reaction-time, which involve attention, perception, and the execution of an idea, as stimulated by sight, hearing, and touch; (2) tests of hand-steadiness and speed and precision of voluntary movements, which involve attention, perception, and the execution of an idea, as stimulated by a rather complex objective task; (3) tests of tactile and kinæsthetic sensitiveness, which involve attention, perception, memory, and reason, as stimulated by size, shape, and relation of objects; (4) tests

[1] This quality I have determined by tests for general vitality—as height, weight, lung-capacity, heart-action, strength, endurance, and special deformities or diseases—and by tests for normal sensation, nervous and motor control, etc.

of ability to solve a picture-puzzle, which involve attention, perception, memory, imagination, and reason, as stimulated by colors, forms, and relations of objects; and (5) tests of intellectual and moral judgments, which involve more complex perceptions, memory, imagination, and reason, as stimulated by concrete intellectual and moral problems. For the symbolic mental processes, I use (1) tests of visual and auditory memory for symbols which involve attention, perception, and memory, as stimulated by words and numbers of varying degrees of difficulty; and (2) tests of symbolic associations, which involve attention, memory, imagination, and the range and quality of associated words, as stimulated by a given word or by a word selected by the child himself.

These tests have served to differentiate, with greater or less clearness, the respective mental qualities of the children studied. In extreme cases, children have succeeded in the one group of tests and have failed in the other. In other cases, it has been rather a question of where the greater stress has fallen. Fifty-eight per cent of the children in the elementary group belong in the objective class of minds, according to these tests; 29 per cent, in the symbolic class; and the remainder, for one reason or another, were impossible to classify.

The following cases will illustrate the contrasts and qualities of mind brought to light in the group of elementary-school children: The first case is that of a boy twelve years old, of robust vitality, normal senses, well-balanced nervous system, and good control of movements. His reaction-time was 0.18 second for hearing; 0.19 second for sight; and 0.16 second for touch. His tactile and kinæsthetic perceptions and judgments were quick and accurate, requiring but six minutes, on the average, for each test. He required five minutes for the solution of the picture-puzzle, on an average, while he tapped 325 times per minute and made but 40 errors in the trial. These are all good records for objective tests. On the other hand, the tests for symbolic ability were relative failures. For visual word-memory, one word only being given at a time, the failure was complete. In auditory word-memory, 40 per cent of the trials resulted in failure. For numbers, the failures were 20 per cent; while a ten-minute test in word-association resulted in only 35 words, every one of them the names of well-known objects or verbs of common action. Upon inquiry it was learned that in his school work this boy had difficulty in reading and spelling, his other work being up to grade.

The second case is that of a boy fourteen years old, well grown, but with inactive lungs, nervous heart, and poorly developed muscles. In the objective tests, this boy was much inferior to the preceding. His reaction-time was 0.34 second, 0.40 second, and 0.32 second, respectively. In the tactile and kinæsthetic tests, he failed entirely after a trial of forty minutes. It required an average time of twenty minutes for him to solve the puzzle, which was a test of perception, attention, and judgment of

form, color, and relations of objects. His speed was but 234 per minute and his average number of errors 88. On the other hand, this boy, with such a poor record in the objective tests, was one of the best pupils I have yet tested in the symbolic tests. He stood perfect in both visual and auditory memories of words, up to three in a series; and for numbers, up to two in a series, of two places each. In word associations he wrote out 125 words, few of them evidently being called up by objects or actions but most of them related to one another as parts of speech, words of similar sound, etc. I found upon inquiry, that this boy did unusually well in reading, language, and number work; but was very poor in manual work, writing, history, and in his judgment of concrete situations.

My conclusions regarding types of mental organization have been more thoroly worked out for this group of elementary-school children than for either of the other groups. It is among younger minds, indeed, that all of our psychological problems can be more easily resolved into their elements. I am convinced that the elementary school will yield the most important lessons in educational psychology and experimental pedagogy. However, I have carried over the problem of mental types to high-school pupils and beyond, in order to confirm my results for a larger field. Much the same objective tests have been made in the more advanced groups that were made in the elementary group. But the symbolic tests have been more thoro and detailed. The visual and auditory memory tests for words have been as follows: (1) concrete words from two in a series up to seven, which I have found to be the limit of the memory-span; (2) abstract words, up to six; (3) nonsense-syllables, up to five; and (4) miscellaneous letter-groups, up to three. The visual and auditory tests for memory of numbers have ranged from two, of two places each, up to five. In addition to these tests, a one-hundred word test in psychoanalysis has been made, to get at the pupil's method of calling up word-images. The general word-association tests have been the same as with the elementary-school children.

Time will not permit of any detailed analysis of the results obtained among these advanced groups of pupils. Suffice to say that they confirm entirely the principles worked out among the elementary pupils. In general, the percentage of objective-minded students is smaller, and that of the symbolic-minded pupils greater. The proportion is 25 per cent of the former to 50 per cent of the latter, with the remainder unclassified. This just about reverses the order found among the elementary pupils. It should be said, in this connection, that practically all the students tested in these two advanced groups were trained in classical high schools. They doubtless represented a long weeding-out process, in which the objective-minded were eliminated. A goodly percentage, however, of very robust objective minds had survived the symbolic education to which they had been subjected. The following case will illustrate: A boy sixteen years

old, Senior in a classical high school, of good general vitality and development, brought up in a rural environment, and with a rich fund of concrete, practical experience. This boy's reaction-time for hearing was 0.18 second; for sight, 0.10 second; and for touch, 0.13 second. His tapping speed was 333 per minute, with an average of but 4 errors. His tactile and kinæsthetic record was 5.8 minutes. These are all good records for objective tests. For the symbolic tests, the records were equally emphatic, tho in the opposite direction. In visual imagery of words, he had an average memory-span of but three words; in auditory imagery, five words. In imagery of numbers, his records were four and five, respectively. Eighty-seven per cent of his verbal reactions to the test in psycho-analysis were the names of concrete objects, or action-words; 1 per cent were purely abstract words; and 12 per cent were failures to give any word in response. When questioned as to these failures, he said that when he heard the words, the mental images of their corresponding objects came before his mind with such distinctness that he thought of no words at all. Further questioning brought out the fact that words heard or seen by this boy always called up at once some object or objective relation. It was found that this boy succeeded best in physics and applied mathematics, tho he was considered a good student generally.

It seems to me that a very significant light is shed upon the problem of mental types as here presented, by neurology, and the general mental development of the race. Objective mental processes and symbolic mental processes have their respective nervous mechanisms. The objective processes depend primarily upon the brain-areas of concrete perception, and the association-centers that are related directly to them. The symbolic processes depend upon brain-areas that have become differentiated from the general areas of concrete perception in a comparatively recent period of nervous evolution. They are dependent upon the general perceptual centers, and become entirely dissociated from them only under abnormal conditions, as in lesions of the brain that have their external manifestation in various forms of aphasia, glossolalia, etc. In brief, the human brain is an organ of objective consciousness. It is organized to mediate symbolic experience only incidentally to objective experience. The nervous arc functions at both the sensory and the motor ends in a world of concrete things and forces. Its symbolic functions are concerned only with the intermediate processes of transforming sense-stimuli into action. However long-circuited by words and other symbols may be the energy of which man's mental life is a mode, it must ever flow from an objective world back to an objective world. What is thus revealed in brain-organization is also shown in the evolution of mind in the race. The mind of man is primarily constituted of objective experience. Symbolic experience is a late attainment, and one incidental to the more fundamental process—a specialization, as it were, of objective experience, and

having no meaning or value without the concrete realities from which it has been derived. Human consciousness for milleniums of years was essentially a consciousness of objects, actions, and concrete relations generally. Symbolic consciousness, as such, is new in racial evolution. Men have been using written symbols for only a few thousand years; and printed symbols for only a few hundred years.

What is thus clearly indicated in the organization of the brain and the evolution of mind, must be significant for education. It seems probable that the objective type of mind to which I have called attention is the racial type of mind; and that the symbolic type is a specialization, and to some extent at least, a departure from racial norms. Neurologically, it represents a disaggregation of nervous elements, and psychologically it represents a disaggregation of consciousness. The ignorance and exigencies of men thruout educational history have led them to make the educational process essentially symbolic. There have thus been developed certain mental qualities by a process of artificial selection. The power of using words and other symbols, more or less unrelated to objects, has been acquired by a comparatively small and highly specialized class of individuals; and these individuals have become the standards and arbiters of intellectual culture. But it is by no means certain that the symbolic type of mind has the qualities of psychological survival; much less is it certain that it has the qualities of biological survival. It is not probable that the future of civilization lies in the class of men and women whose intellects and whose lives function so exclusively in symbolic experience. It seems to me at least doubtful whether public education should longer be an agency for the selection and perpetuation of symbolic-minded individuals, and the elimination of individuals whose reactions to culture and to life are essentially objective.

COMMUNAL CHEMISTRY: HOW MAY THE TEACHING OF CHEMISTRY PROMOTE THE WELL-BEING OF THE COMMUNITY?

LEWIS B. ALLYN, STATE NORMAL SCHOOL, WESTFIELD, MASS.

Ten decades and more have passed since the introduction of chemistry into the curriculum of academy and college. From earliest times one of the strong arguments in favor of the subject as a study for pupils has been the fact that it offers exceptional opportunity for the investigation of matter and affords a more or less vague kind of mental training. This latter was known as "culture" and like mathematics was supposed to train the general reasoning powers of the pupil. Modern research has quite disproved the theory of "culture" and sets aside the dogma of universal reasoning power.

It is safe to assert that in a large percentage of chemistry courses the instructor has looked for the results of his teaching in the immediate pupil.

We shall attempt to prove that this aim falls far short of what the subject may be made to do.

In the twelfth chapter of Romans we read of "reasonable service." Chemistry in the hands of a pupil may be made to perform "reasonable service" outside the laboratory.

We would not in any way seem to adversely criticize the worthy pioneers of chemistry teaching or attempt to detract from their well-earned honor. Without contumely we shall try to show that however good chemistry for the pupil-alone may have been, chemistry for the pupil-and-the-community is better.

If the writer may be pardoned the reference, his introduction to chemistry first in the high school and later in the college gave him a fair degree of familiarity with the elements as then known, likewise their combinations and marks of differentiation. The analytical work consisted for the most part of the examination of the contents of sundry bottles labelled X, X_1, X_2, and the like. They contained material which everyone knew had been concocted by the instructor or selected from the laboratory by him. Pupils today call such samples "dead stuff" and the name is not inappropriate. At any rate they had no living interest for the class. None of us suspected nor did the instructor remotely suggest that these bases and radicals which we were laboriously isolating were bone and sinew, part and parcel of the community in which we lived. It was distinctly the chemistry of the schoolroom, and vague indeed were our ideas that these same sulphates and chlorids and nitrates and a score of other radicals made life not only happier but also possible; that some of them misplaced would hang out a danger signal that must not be lightly disregarded.

Not until the writer had been an instructor of chemistry for some years did it occur to him to supplement these same X's by sending the pupils out into the town and home to find where they were naturally met with and how they functioned in everyday life. Perhaps one of the most helpful suggestions of modern education is that which prompts the teacher to notice units of activity in a community and adapt them to the training of the pupil. To this end we see pupils compiling lists from the advertisements of local mark-down sales to supplement percentage work in arithmetic, computing the cost to the town of the walks and macadamized streets near their homes; proofreading the local newspapers and suggesting better expressions instead of taking this material from the stereotyped grammar—applied English, is it not? We see them conducting anti-fly campaigns to supplement and vitalize the biology work and in a hundred other ways coming close to actual conditions of life. Any one of these things is a communal unit. That it has a definite bearing upon the welfare of society does not in the least detract from it as an educational factor. Any instructor who is interested in this phase of applied education can make chemistry conserve the community interests.

In order that this teaching may be effective there must be no turning pupils loose upon the town, no indiscriminate selection. That a method may be fruitful, there must be systematic investigation, but too often this investigation is pushed to, and even beyond, the fatigue point by insisting upon the examination of substances which are apart from the pupil's experience and in which he sees nothing except a school problem.

"Why can't we examine the things we should like to test instead of having to everlastingly work on some white powder or other?" remarked a high-school boy yesterday. I asked what he would like to examine and he replied, "Waste from the gas works." Further questioning brought out the information that he had been reading in one of the popular magazines concerning the utilization of waste material, and was enthusiastic over the chemical possibilities of the subject. His instructor had said that he did not want him "fussing around the laboratory with any gas mud." This perversion of pedagogy needs no comment.

As illustrative of two different methods of gaining chemical experience note the following: Sodium and potassium are most easily detected by the flame test, which consists, briefly, in holding a clean platinum wire wet with the solution in the blue flame of the Bunsen burner. A yellow coloration indicates sodium, a lilac tint, potassium. That the color image of the volatilized elements may be filed for future reference, it is customary for the instructor to provide relatively pure salts of these respective metals, thus working from the known to the unknown. Up to this point the methods are identical; the digression begins with the application of the acquired knowledge. Two courses are open to the teacher: he may require pupils to examine several liquids or solids which the laboratory provides, thus keeping chemistry strictly within the school building, or he may permit—note the difference in the pupil's attitude caused by the words "require" and "permit"—he may permit the pupil to examine substances of his own choice for the presence of such important elements. Here, taken from a pupil's notebook, is an abridged list of substances found to contain sodium or potassium:

Perspiration.
Ash from meats, cereals, vinegar, and milk.
Soaps and washing powders.
Soils, water residues, fertilizers.

As this investigation was entirely voluntary on the part of the pupil, sodium and potassium take a definite and lasting meaning not acquired by the bottle method of the laboratory.

Of all instructors, the teacher of chemistry is among the most fortunate because of the abundance, yes, wealth of correlated communal interests, every one in some degree dependent upon chemical investigation; if not dependent upon, at least bettered by such research. Where can be found a more enthusiastic body of investigators than a class of chemistry pupils

who do their work by the method of the beckoning hand rather than by the method of the clenched fist?

To turn the thought of the pupil toward some of the problems which occur in every town is doing a distinct public service. Chemistry originally came from the people; why not give it back to them? Here are some suggestive problems, the solution of which incites the pupil to continued effort along chemical lines. Some of these problems are to be studied and then reinvestigated from time to time during the course to note any specific changes or possibly improvements in conditions. They may be roughly classified under two heads as recurrent or permanent problems; sporadic or temporary problems.

A sanitary analysis of water with determinations of color, odor, taste, total solids, chlorin, ammonia, nitrites and nitrates, phosphates, absorbed oxygen, dissolved metals, and hardness.

If one knows what significance to place upon these factors, tabulated results of waters from different sources are not only of interest but of value. It has been our experience that every pupil is anxious to test his favorite spring and compare the results with other supplies.

Analysis of milk with determinations of fat by the Babcock method, total solids by Richmond's milk scale, proteins and milk sugar by the formulas of Olsen, Van Slyke, and Lythgoe.

The last three determinations give excellent drill in applied mathematics. After the determination of these normal constitutents of milk by means of which a more or less arbitrary grade is established, an examination of the sample for foreign matter, adulteration by means of dyes, preservatives, added water, and by skimming is not only important but essential.

Surveys of the local supplies of ice cream, cheese, and condensed milk may be made. Pupils usually take the greatest interest in determining the composition of ice creams as regards fat, fillers, gelatin, etc. They enjoy the search for preservatives in cheese and the grading on the butter fat basis, and take pride in being able to say with assurance that "this sample of condensed milk contains 6.64 per cent of butter fat and twice condensed, while that one contains only 3.31 per cent and is made from skimmed milk."

The detection of coal-tar dye in candies almost always results in a lessened consumption of cheap confectionery in the town where the investigation is conducted. Many dealers sell, and many children eat, this debased product, simply because their attention has never been called to the fact that mineral dyes are injurious to health.

For girls, simple chemical surveys of dentifrices and cosmetics afford opportunities of no mean value. Many of the common radicals such as CO_3, O, Cl, PO_4, NO_3, S, BO_3, many important bases, as Hg, Pb, K, Na, S, Si, Ca, etc., are met with and identified by appropriate tests. This knowl-

edge rightly secured, that is, secured by the free will of the pupil, forms a valuable background of chemical information.

There are few more fascinating lines of investigation to the average pupil than a well-planned line of distillation experiments. Each of these may be made to affect the community as well as the pupil if the instructor so desires. In order to master the technique of distillation, it may be well to allow the operator to purify several samples of water which their previous tests have shown to be contaminated.

The addition of a little dye like Ponceau red sometimes serves to bring out the fact that volatile substances can be separated only by distillation. As soon as pupils acquire a fair degree of skill in this work, they can be given several entertaining and valuable exercises in the extraction of essential oils from various herbs and spices. The common wintergreen (*Gaultheria procumbens*), twigs of the sweet birch, and ground cloves furnish suitable material for such experiments.

It is not a difficult matter for the pupils to determine the alcoholic content of patent medicines, tonics, invigorators, liquors, tinctures, root beer, extracts, etc., with accuracy to the second decimal place, which is as far as we usually calculate in ordinary commercial analysis. While this work may not materially lessen the consumption of alcoholic beverages in any community, it has resulted many times in making the parents exercise a caution in the selection of medicines for family use.

The other day I gave this bottle to some students who were anxious for more chemical investigation. The liquid is soak water from a local tan-yard. Bombay hides have been washed and hundreds of gallons of the liquor accumulated. The proprietors of the tannery did not dare to drain it into the stream lest it kill the fish, nor throw it onto the land, lest cattle be poisoned by eating the grass. They exercised this caution because they had heard that Bombay hides are sometimes preserved with arsenic, and furthermore this liquor looked different from any they had been accustomed to see. A sample was accordingly submitted to the laboratory. The question was: Does this liquid contain anything injurious to the animal life?

After due investigation, the students found that the liquor was not only arsenical but also contained $HgCl_2$. So the question was answered and a problem solved. Here are examples of other local problems which have been solved by the pupils:

Coal from a local concern was found to contain an excessive percentage of ash, and a correspondingly small amount of available carbon. The firm had nearly decided to purchase a supply of this material but waited for the report from the laboratory and it was well they did.

A post-preserver offered to a telephone company was found to consist of salt and baking soda. You will note that in order to do this work it was necessary for the pupil to recognize two bases and two radicals.

A preparation for leaky automobile radiators was found to consist of linseed meal, colored with coal-tar dye and scented with oil of mirbane.

Fake preparations purchased by unsuspecting housekeepers supposed to render kerosene and gasolene safe consisted of common salt colored with coal-tar dye.

"Lightning Silver-plating Fluid" for the instantaneous plating of brass, copper, and composition metals contained no silver but was composed of red oxide of Hg dissolved in HNO_3.

Time will not permit us to give examples of scores of other investigations of like nature. We are convinced that the health of the pupil is of primal importance and have seen that chemistry may be made to conserve this important asset. The food supply holds a prominent place in eugenics. From this supply can be drawn innumerable chemical exercises, easily within the scope of the laboratory, and entirely within the concept of the pupil. It appeals to us as good pedagogy to let the pupil get the first-hand knowledge of the common chemical elements by doing actual work with them. They must not, however, get the idea that they are chemists, and must be shown that the approach to chemical perfection is hard and difficult. By studying the interests of the class, one may readily make chemistry teaching perform a service which is reasonable and offer a reason which is serviceable.

CHEMISTRY AND HOUSEHOLD SCIENCE

J. F. SNELL, PROFESSOR OF CHEMISTRY, MACDONALD COLLEGE, STE. ANNE DE BELLEVUE, QUEBEC, CANADA

That I should have been honored with an invitation to address the Science Department of this great education association on the subject assigned me, "Chemistry and Household Science," is, I think, significant, on the one hand, of the growing interest in educational circles in the preparation of woman for woman's traditional duties, and the consequent trend of feminine education toward the domestic, and, on the other hand, of a certain consciousness of difficulty in adapting the teaching of the somewhat abstract science of chemistry to the requirements of so practical a class of students—a class whose instinctive preference for the practical is being fostered and stimulated by the special kind of education they are receiving.

The train of circumstances which has brought me to this platform, altho not in any sense extraordinary, is perhaps worth reviewing, as illustrating the interest aroused by any attempt to fit instruction in this science to the needs of such students.

Five years ago I took charge of a class of young women, such as are to be found at most agricultural colleges in Canada, and I believe also at many in this country—a class of most varied preliminary education

engaged in the study of the household arts in the light of the natural sciences. In my five years' experience this class has included more than one Bachelor of Arts, simultaneously with girls of very slight education. Some of its members have previously studied chemistry—usually in the high school. A very few have had a college course in elementary chemistry. I can remember none who had any knowledge of organic chemistry. And certainly none had learned to apply her chemistry to the everyday affairs of the household.

This class was to devote two hours a week for nine months to the study of chemistry. To make the course of some practical value, and even to secure the essential amount of attention and interest, it seemed to me desirable to give prominence to the applications of chemistry to household problems. Moreover, it appeared desirable to introduce such applications as early as possible in the course. To begin with a course in pure chemistry, to be afterward supplemented by one in household chemistry, would be to sacrifice the value of both divisions of the subject and to lose the interest of the class at the outset.

The treatment of the theoretical side of the subject must necessarily be circumscribed, in order to allow of the introduction of the household applications. And of these applications only the most important must receive consideration, namely, (1) food chemistry, including not merely composition but also digestion and nutritive value; (2) the chemistry of cleaning, including alkalies, soaps, hard water, dry cleaning, the tarnish of metals, and, if practicable, bleaching and bluing; (3) combustion and fuels; (4) textile chemistry.

To resume my confession—I found no textbook that quite fitted my requirements. What teacher ever does? The lecture system proved unsatisfactory with a class unpracticed in note-taking. So I was driven to join the noble army of authors.

A few months ago I had the expository part of my course printed for my class. This booklet I am now expanding into a larger one, which will be regularly published and which will better represent the course as given, since it will include directions for the lecture table and laboratory experiments, which have always formed an integral part of the instruction.

Now it came to pass that the distinguished vice-president of this science section of the National Education Association, the deputy commissioner of education of the state of Massachusetts, visited Macdonald College in my absence, and afterward wrote, asking information about our courses for household science students. In replying, I forwarded a copy of the little book. It must have found favor in his sight, for it was upon his recommendation that I was invited to come here.

In the course represented by this booklet—and better represented by the forthcoming revision—the definition of chemical change is first discussed. Such familiar illustrations as the charring of sugar, the souring

of milk, and the fermentation of fruit are used, in addition to those commonly preferred on account of their theoretical simplicity—such actions as the burning of magnesium ribbon and the rusting of iron.

Decomposition is exemplified, not only by such chemically simple changes as the effect of heat on limestone, and the electrolysis of water, but also by the effect of heat on sugar or starch, and the putrefaction of meat or casein—reactions with which the term decomposition is commonly associated in the lay mind.

Following the conception of decomposition, the student is introduced to the ideas of "element" and "compound" and to chemical nomenclature reduced to its lowest terms—the signification of the suffixes *-ide* and *-ate*. Chemical notation is utilized, but the student is not required to master it. Reactions are commonly expressed in words, as well as in symbols. The atomic theory is presented dogmatically and its relation to chemical notation pointed out.

Instead of next passing to a study of the elements and their binary compounds—as is commonly done in purely cultural courses—we pass directly to the definitions of "acid," "base," and "salt." Hydrogen and oxygen having been prepared incidentally to the introductory topics of the course, it is not difficult to show by laboratory experiments that the substances called acids not only have a sour taste and a characteristic effect on litmus, but also liberate hydrogen when treated with metals. The formation of salts in these reactions can be illustrated not only by evaporating the solutions, but also by a lecture experiment in which concentrated hydrochloric acid is treated with sodium, and the purified solid product tasted by the class.

It is also possible to establish by qualitative experiments that the typical base, caustic soda, contains the three elements, sodium, hydrogen, and oxygen. The insoluble bases and basic oxides are then introduced and the effects of acids upon them illustrated and explained. The rusting of iron and the tarnish of other metals are accounted for as due to superficial oxidation, iron oxide scaling off and exposing new surface, while zinc and aluminium oxides are adherent, and serve to protect the metal from further corrosion. The various artificial protective coatings for iron are discussed, and the virtue of prompt polishing of stained household cutlery impressed. The effect of oxalic acid and salts of lemon (acid potassium oxalate) in removing rust stains from fabrics is also explained here.

The conception of *strong* and *weak* acids is next introduced by experiments showing that normal solutions of hydrochloric and sulphuric acids attack zinc more rapidly than do the equivalent solutions of formic and acetic acids. The principle having been illustrated, the student is asked to memorize a classification of the common acids and bases, according to strength.

A laboratory exercise follows, which not only serves as a review of this classification, but also affords practice in nomenclature, and introduces the conception of hydrolysis. A dozen soluble salts are given out with their common and chemical names. The students dissolve the salts and record for each the reaction to litmus, the name of the corresponding acid and base, and the relative strengths of these acids and bases. Reviewing the record, they discover that in aqueous solution (1) the salts of strong acids with strong bases, e.g., sodium chloride, are neutral; (2) the salts of strong acids with weak bases, e.g., aluminium sulphate, are acid; (3) the salts of weak acids with strong bases e.g., sodium carbonate, are alkaline; (4) no salts of weak acids with weak bases have been given them. That the water has acted upon the salts derived from either a weak acid or a weak base can be made clear—at least for the case of a weak acid—by an experiment with soap. Dissolved in alcohol, a good soap is neutral to the indicator, phenolphthalein. The addition of water to the alcoholic solution causes the pink coloration indicative of alkalies to appear. The water has liberated a certain amount of acid and base, and the latter, being strong, has affected the indicator.

Hydrolysis may be defined as such action of water on a molecule as results in the production of two or more new molecules. In the case of a salt the new molecules formed are an acid and a base. But the general principle of hydrolysis is illustrated in many other reactions of importance in the household, and particularly in the processes of digestion of the three great classes of food constituents, proteins, carbohydrates, and fats. Hence the prominence accorded to a phenomenon commonly ignored in elementary chemistry.

The interaction of two salts, with the production of a precipitate, is illustrated by the action of soap with hard water. The topics of temporary and permanent hardness of water, and the theory of water-softening are now in order.

Ammonia comes next, and serves as a connecting link between the alkalies and the alcohols. For ammonium hydroxide is an alkali, and can be classed as a base, if we slightly modify the definition of base originally learned. And familiarity with the ammonium radical prepares the student to accept the radicals of the alcohols.

Incidentally, uses and abuses of "household ammonia" may be referred to.

The current of thought now flows smoothly into the regions of organic chemistry. Alcohols are the hydroxides of radicals composed of carbon and hydrogen. Like alkalies, alcohols react with acids. The products of such action are water and esters. Fats are esters. Like salts, esters can be hydrolyzed. The hydrolysis of esters is accelerated by the removal of any product of the reaction. The presence of a strong base results in the immediate removal of the acid formed in the hydrolysis of an ester.

Hence saponification is simply the hydrolysis of an ester in presence of a base. Therein lies the basis of soap-making.

The dissolving of fats in such liquids as benzine is contrasted with their behavior on shaking with water. The difference is that between solution and emulsification. Both these processes are utilized in the cleaning of fabrics; the former in dry cleaning, the latter in laundry practice, where the marvelous emulsifying powers of soap solutions play a part of immense importance.

Fats, having been considered in the rôle of raw material for soap-making, and in that of dirt on fabrics, have now to be discussed as constituents of foods. Their presence in some foods is obvious. In others, such as oatmeal and nuts, it can be demonstrated by extracting the finely ground material with a solvent, filtering, and evaporating. The use of benzine, rather than ether, as the solvent will be appreciated by girls of weak stomach.

Fat may also be extracted from the leanest meat, if water has first been removed from the tissues by kneading in strong alcohol. The proportions of fat in various foods is now discussed with the class, then the process of digestion, and the energy or fuel value.

In studying the digestion of fats, which according to recent views is essentially a hydrolytic process, the student meets with an example of the effect of a ferment in accelerating hydrolysis. The same influence is later shown to be equally important in the digestion of carbohydrates and proteins, and is more readily demonstrated by laboratory experiments upon nutrients of these classes than upon the fats.

Following the fats, the carbohydrates are discussed. By placing solutions of typical sugars and polysaccharides in parchment dialyzers, surrounded by water, and allowing them to stand over to the next meeting of the class, the fact that only the sugars pass thru membranes can be demonstrated. This explains the necessity of hydrolytic cleavage of the polysaccharides in digestion. The necessity for the hydrolysis of the disaccharides, cane-sugar, malt-sugar, and milk-sugar, it has been my custom to leave unexplained.

The digestion of starch by saliva is, of course, easily demonstrated in the laboratory, and an invertase can be isolated from yeast and used to illustrate fermentative hydrolysis of cane-sugar. Acid hydrolysis can also be readily demonstrated with cane-sugar, starch, and filter paper. Incidentally to these experiments the student becomes familiar with the Fehling test for reducing sugars, and the iodine test for starch. The modification of the Fehling solution devised by Dr. Stanley Benedict (now of Cornell Medical College) I have found very convenient for laboratory use, as it is kept in a single bottle, and does not deteriorate.

Alcoholic fermentation and caramelization of sugars are topics of obvious interest to the housekeeper.

The treatment of the proteins, the most complex and therefore the most difficult class of nutrients, must now be faced. Their unique composition and functions must obviously be emphasized, and the wide divergence of properties among them must not be concealed. A few of the leading protein tests are learned by experiment upon isolated proteins, such as egg albumen, blood albumen, and casein, and are then applied to food materials, and also to the discrimination of silk and wool from cotton and linen. The digestion of proteins is illustrated by treatment of fibrin with pepsin in hydrochloric acid solution, and with trypsin in sodium bicarbonate.

To complete the discussion of foods, the composition of those of vegetable origin is contrasted with that of foods of animal origin. The leading exceptions to the general rule that vegetable foods are carbohydrate foods, and animal foods protein and fat foods, are recounted.

In the discussion of foods, fuel value has to be given prominence. Irving Fisher's mode of comparing fuel values and expressing the composition of foods recommends itself by its simplicity. It is of much greater value to know what percentage of the total fuel value of a food comes from protein than to know what percentage of the total weight is composed of protein.

Dietary standards conclude the subject of foods.

The discussion of combustion I have allowed to follow that of foods, tho it would be possible and might be advantageous to introduce it much earlier.

The course I have outlined occupies the time at the disposal of my class. Teachers having more time or a better prepared and better graded class can easily expand the course upon the same principle of selecting the theoretical matter appropriate to the household applications of chemistry which they desire to bring to the attention of the class. Whatever work is undertaken, the habits of careful observation and logical deduction should be fostered. Any household science course which does not promote the scientific spirit is evidently misnamed.

APPLIED BOTANY

GEORGE A. WORKS, INSTRUCTOR IN AGRICULTURAL EDUCATION, UNIVERSITY OF WISCONSIN, MADISON, WIS.

The phases of this course in botany which are here outlined are the results of six years' use of the material in an effort to develop a course adapted to the interests and needs of the constituency of a high school in a community which is essentially rural. The outline is not offered as a complete course in botany, as only what may be termed the "applicable" portions of the work are given.

In the work on seeds a study was made of the following topics: selec-

tion, identification, proper care, judging of quality, and germination tests that could be used under ordinary farm and home conditions. The work was centered around a more or less intensive study of corn, with comparative consideration of other seeds. It was not thought sufficient that a pupil should merely watch the germination of a miscellaneous collection of kernels of corn but he was required to make ear tests according to the most approved methods. Conditions necessary for germination found many applications in farm and garden practice. A limited study was made of the food constituents of some of the more common seeds, which study terminated in a consideration of their use for human food as well as for lower animals. This laid the basis for the development of some idea of the importance of the great cereal crops.

Because of the increasing importance of noxious weeds, the pupils were familiarized with the common local species. This identification was accompanied by a study of the botanical peculiarities of the plants which made them so objectionable, such as methods of seed distribution and vegetative reproduction. This study was accompanied by a consideration of the methods of eradication. Members of this group furnish some of the best material for a study of seed and fruit distribution.

In the work on stems a careful study was made of some of the practical applications in agriculture and horticulture in connection with such topics as vegetative plant propagation, transplanting, pruning, and proper methods of treating tree injuries.

If time permitted, attention was given to commercial products derived from stems, such as turpentine, resin, corn products, camphor, and rubber. A parallel line of work was conducted in connection with the study of roots.

In addition to the various economic phases of such character as has been suggested, certain subjects were considered of sufficient importance to justify a more detailed consideration. These topics included a more or less intensive study of a few farm and garden plants; e.g., corn, clover, potato, and the oat. These are only suggestive, as in different sections of the country other plants may be better suited to class needs.

A little work was done in elementary forestry, mainly to familiarize the pupil with some of the common native trees, methods of forest preservation, and the general problems of forest conservation. It was hoped by this means to put the students in a position to read about the problem with a reasonable degree of intelligence.

An effort was made to give the pupils an idea of plant breeding and its significance in advancing agricultural and horticultural conditions. In Wisconsin marked advances have been made in the development of varieties of corn suited to its climatic and soil conditions and hence the work was centered around this phase of the problem, altho not limited to it. The technical nature of the subject of breeding makes an intensive consideration out of place with secondary-school students.

Three or four weeks were devoted to elementary bacteriology. The following topics are indicative of the character of the work: occurrence, conditions favorable for growth, and some of the results of their growth. Experimental work was used to illustrate the topics as far as possible. Some of the experiments that proved especially satisfactory were tests to show the presence of bacteria in the air under varying conditions, to detect them in the soil, water, milk, and on the body. This work was followed by a study of the significance of bacteria in fermentation processes, decay, nitrogen-fixation, and in a very elementary way their relation to some of the common diseases found among the lower animals as well as those of human beings. Sterilization and disinfection were illustrated also, with some of the more common methods employed in the household to protect food materials against bacterial action.

Because of local conditions a study was made of blue-green algæ in their relation to pollution of water supply. The water for the city is drawn from a small lake near by, and abundance of illustrative material could be obtained by straining the water as it flowed from a tap in the laboratory. The study of the structure of the water system together with a consideration of the conditions favorable for the growth of blue-greens and the knowledge the pupils already had of bacteria put them in a position to understand the danger of using the water. Methods of treating such water so that it might be used for drinking purposes without danger were taught. This portion of the course was found very helpful in giving pupils an intelligent attitude toward some of the problems of personal hygiene and of home and public sanitation. Such work properly handled will lay a foundation for intelligent community ideals in sanitation and for proper co-operation with civic authorities in cases of outbreaks of communicable diseases. This attitude is sadly lacking in the average American community. Thruout this work the "pure" phases of the subject were determined largely by the practical applications which were to follow. In fact a consistent effort was made to select such material for study as had a bearing upon the community life and had a first-hand interest to the pupil.

The method of treatment of yeasts resembled materially that described for bacteria. The usefulness of the yeasts is sufficient to justify a somewhat detailed consideration.

The fungi offer such an abundance of material that care had to be exercised in the selection. The forms which we found best adapted to our purposes were the following:

1. The mildews, which were approached thru a study of grape mildew. Material was easy to obtain and is sufficiently large to be handled in a satisfactory manner. A study of the life-history of this form puts the pupil in a position to understand the significance of the spraying.

2. Mucor served as the basis of the work with the molds that are of

importance in the household. The study of the life-history and conditions favorable for growth and reproduction enables the pupil to appreciate intelligently the means of preserving food from the action of molds by drying, use of chemical preservatives, low temperature, and high temperature followed by hermetical sealing.

3. A careful study was made of the smuts and rusts of grains. A method of treatment similar to that indicated for mildew served as a basis for a discussion of the methods of treating grain smut. The attention of the students was directed to the efforts that are being made to develop rust-resistant grains.

4. A brief study of the higher fungi was made and the economic importance of the bracket fungi and the mushrooms were considered.

As has been previously stated, thruout the course an effort was made to so handle the work in "pure" botany that the student was able intelligently to connect it with the applications which surround him on all sides. To permit the work to be a consideration of so-called practical work without the proper scientific basis would entirely defeat the purpose of such a course.

The emphasis that was placed upon the indicated phases of the work meant that there was necessarily considered elimination of material that is usually found in the botany course. This elimination was made to a considerable extent by decreasing the number of plant forms studied. The average course is developed so as to show as complete an evolutionary series as possible. No such effort was made in this course. As a result the pupils had definite ideas of those forms which were studied instead of being bewildered by almost numberless studies of forms, the great majority of which most of the pupils will never even hear by name outside of the classroom. The development of an evolutionary series by the plant kingdom is an interesting and valuable exercise in its place, but that place is not in a Freshman or Sophomore class in high-school botany.

Botany, perhaps more than any other high-school science, has suffered from an overburden of scientific terms. Teachers have often deceived themselves by thinking pupils were making real progress in the subject because they were learning new terms. They have mistaken the shadow for the substance. Often a pupil learns the term without mastering the idea. Pupils should not be allowed to grope about using bungling expressions because of lack of proper technical terms: every scientific term essential for progress should be mastered. But we found that it was possible to reduce greatly the number of terms that are used in the ordinary text in botany. This together with the use of English words or compounds instead of foreign derivatives has materially simplified the terminology problem.

This course is not offered as one that is above criticism nor as one that should be adopted *in toto* by another school. It is merely an effort to

put such a content into a high-school course in botany as is adapted to the needs and interest of high-school students, to the end that botany may accomplish more fully and completely the purposes it should serve in a secondary school made up of people who for the most part will receive no further school training in the subject. It is trite to say that there is a public demand for better preparation of the young people in our schools for the conditions under which they are to live. The science subjects are especially subjected to this constantly increasing pressure. Especially is this true in the case of botany as a result of the great wave of interest in agricultural education which is now sweeping across the country. In many schools it is being displaced by agriculture. This is a mistake. The kind of agriculture which should be taught in the American high school should not supersede botany nor the other basic sciences, but should accompany them and be based upon them. To prevent this substitution the teachers of botany have before them the problem of reorganizing their work in this subject so that it may be built around a core of economic material. The course that has been outlined is but one of a considerable number of attempts that are now being made to attain this end. There is further need of experimental work of this character. High-school teachers should assert their independence of the miniature college courses in botany, because such work is not adapted to the economic and educational needs of their pupils.

The courses that we now find are the logical result of the rapid development of secondary-school botany during the last twenty-five years. The most natural thing to be done was to put in the organized material of the college course because teachers were best prepared to handle it and text-books were based upon such courses. But the stage is passed when such work should dominate the high school. The fact that teachers are doing so much work of an experimental nature in this field indicates that they are awakening to a realization of this condition. The securing of proper teaching of botany, and other high-school sciences as well, is not a problem that can be solved by the sporadic efforts of secondary-school instructors. Superintendents and principals must lend their aid or the work will lack the necessary continuity because of the limited tenure of office of the average high-school instructor. But there is even a greater possibility for assistance on the part of those responsible for the administration of courses of study. They may turn to the institutions preparing teachers and justly demand that these people shall have a more adequate preparation for their work. Such preparation will mean that the prospective teacher as a part of his scientific training will have work that will fit him to seek out and organize material adapted to the high-school pupils' interests and needs.

Those who undertake work of this character may be certain that their efforts will be subject to criticism by those who mistake or misunderstand its aims. The following quotation is illustrative of the point in question:

A radical phase of the movement toward economic biology appears in the demand for lessons on all sorts of topics bearing on horticulture and farming, from injurious insects to plant-breeding. Doubtless in some country high schools a good deal of such work can be made thoroly interesting and profitable. And in any schools such matter, in very moderate amounts, may properly be assigned for supplementary reading. Leaving out business and other technical courses however, when one begins to make economic considerations the measure of educational values he begins to pile up absurdities. As soon as the teachers of geography, history, and geometry are willing to bend most of their respective efforts toward instruction regarding commercial routes, the alternation of periods of activity and depression in the world's business, and mensuration, it will be time for biology teachers to consider favorably corresponding pseudo-utilitarian innovations. But if the most valuable crop that any country can produce is intelligent men, it must follow that any kind of study which is pre-eminently suited to cultivate habits of careful observation and orderly thinking in school children is especially important.

The writer quite evidently loses sight of the fact that if these habits of "careful observation and orderly thinking," which all concede are highly desirable, are to be applied in the after life of the pupil they must not only be formed during the period of youth but they must be connected with the problems of social interest which are in a large measure either directly or indirectly of an economic character. This habit, formed during the high-school period, means that in the majority of cases the result will be not merely a high-school pupil in botany but one who will be a lifelong student of these problems which so vitally affect human happiness and social progress.

PHYSICS AND THE EQUIPMENT PROBLEM

J. A. RANDALL, PRATT INSTITUTE, BROOKLYN, N.Y.

Constructive suggestions which comprehend both the outline and the detail of physics content and method, is our present need. We lack adequate machinery for circulating information and for stimulating professional consciousness and thought. We are a nation of promoters and we have been promoting with passionate zeal industrial education, vocational education, and all sorts of causes labeled "progressive." What we greatly want now is labor wisely devoted to finding out how to give a vocational education, or an industrial education suited to American conditions. Similarly in physics instruction we have been convinced by the so-called "Mann movement" that we need to do a very different type of work in physics; but who is to tell our teachers definitely what to do or, better still, put them in the way of finding out for themselves?

In our schools, we have a greater investment of money and brains than either of the great trusts of which we talk so much. When we look about in this big school business for means of handling some of the transactions which are obviously necessary to the progress of our school business as a whole, we find it a weakly organized concern. Our teachers' associa-

tions meet to listen to papers, get acquainted, and gossip. Occasionally they appoint committees to influence legislation or executive action.

How effectively teachers can make their organizations count in advancing a special cause is illustrated by the equal-pay campaign in New York City. We should be more proud of this if it had been a fight for the school instead of for the teacher, but if the profession is as unselfish as we like to think it, we should be able to unite quite as effectively to solve some of our school problems and to establish a more permanent policy of usefulness.

The sciences as a field and physics as a typical subject serve to illustrate how small an influence single papers have and how completely we devote our meetings to activities of little permanent value in hastening the evolution of schools.

There are fifteen science and mathematical associations which have united to form what is known as the American Federation of Teachers of the Natural and Mathematical Sciences. This organization has about two thousand members, and jointly or separately the affiliating associations hear about fifty programs a year. Yet our sciences are among our poorest taught subjects and physics is said by some to be as dry as dust and at least twenty years behind our times.

Listening to papers has accomplished one thing: we have come to agree upon the ideals of physics teaching. Physics teachers have been awakened to the vast opportunity for improvement and Professor C. R. Mann's book on *The Teaching of Physics* summarizes the current opinion as to the purposes and method of physics teaching. We have arrived at the point where we can talk, in a very intelligent way, as to what we ought to do to make physics work valuable as a preparation for real life. Our state departments give out syllabi to which they have added all the commonly approved "practical topics." But the classroom work in most schools is just as impractical and as deadly as ever in its effect upon the student.

There are a few teachers who are taking steady steps to improve the instruction which they are giving. These men usually have that rare personality which vitalizes whatever work they assign their students and insures its success. The rank and file of teachers may be divided into two groups: First, those who learn what little physics they know by studying by themselves while they are keeping one lesson ahead of their class; second, those who have studied in a research physics atmosphere at college.

Whatever the previous training of the teacher may have been, it is true on the average that he teaches several other subjects and leads a life that keeps him out of touch with commercial, technical, and industrial conditions. He is supposed to prepare students for real life and yet he knows little about those phases of real life most closely related to the subjects which he is teaching.

In the past, whenever a teacher has become well known or has been unusually successful, he has frozen his ideas and sold them to the school public in the form of a text. Most texts have had no greater influence than some of the addresses I have mentioned.

As individuals we physics teachers have been trying to do our work and progress, but our efforts have not been guided in any one direction. We have not consciously *acted together* toward any definite end and we cannot hope to make progress against modern conditions at any better rate than would a mob against an army.

The conditions which must be met are complicated, but let us discuss a few. In the science work we must look upon the content and the method as necessarily undergoing constant changes. The practical applications of science are increasing in number at a remarkable rate. The relative importance of any scientific principle or fact should be questioned each year as the course is being outlined by the teacher.

The continued use of any one bound text or laboratory manual almost inevitably results in a course systematic in its nature. Such is the character of the instruction in almost all of our small schools. The loose-leafed laboratory manual has been introduced and allows the desired flexibility in the laboratories. No laboratory manual should be published in a binding.

In the past we have considered that the expression "a course in elementary physics" should mean a very definite thing. We must look forward to the time when we shall have at least four types of courses in elementary physics, each adapted to the mental make-up of the student at the age when the course is given. We have been prescribing a dose of the same size and strength to boys and girls, young and old, students with a motive and students without. In the future our mixed class in general science will learn a few qualitative facts from the field of physics. In the Junior year our boys will do a more quantitative course, consisting of a large number of industrial and home applications of a very few physical principles and laws. In the Freshman year in college a quantitative course of the same general character, but much more difficult and comprehensive, should be given. In the later college years, a systematic historical course may be appropriate.

A course in physics should deal largely with real things. Theoretical instruction in the principles and uses of these things must be preceded by experience with these things. Take a topic like electricity, for example. A "chalk talk" on electricity is about as absurd an activity as we commonly meet with in school. The first thing that a student ought to have is a piece of electrical apparatus which he can use and from which he can get some real experience. Only then will a discussion of theory be a reasoning process, rather than a simple matter of memory. I believe that the kind of thing that science courses should do is to develop the sort of judgment and

common-sense about things that I absorbed on the farm and working in stores. There are a few men in this country who are teaching applied science in a way that accomplishes just that thing. Girls need to learn much the same principles as boys, but they must acquire them thru applications which relate to a woman's life. I must here pay my compliments to the soft course which merely amuses the child. It's the hard work of life which builds up character, and our physics course must be hard work which the student is willing to do, because he believes it is worth doing.

I hope you have asked yourself this question:

How can the National Educational Association help to make the instruction in physics in every school of this country vital and a preparation for later life? How can it help to keep it of that character?

As the National Education Association is now organized, the only way of getting anything done is to appoint a committee. There have been many attempts to improve physics instruction by committees, and but few have accomplished anything of note. The reason for this has usually been either that they have devoted their energies to writing syllabi and reports, or that committee organization has been too cumbersome and funds have been inadequate.

There now exists a so-called joint committee of the American Federation. This joint committee has many of the limitations of its predecessors, and if we accomplish more, it will be due to a different plan of action. Each member has been asked to organize a subcommittee to take up some part of the work. For example, Professor Beals, of the New Jersey State Science Teachers Association, has organized a subcommittee, consisting of Professor McClenahan, of Princeton University, Professor Thompson, of Rutgers College, and others, to work out suggestions of a course in mechanics for the three-teacher country high school. The state of New Jersey will publish the report as a bulletin. As chairman of the New York State Science Teachers Association committee, the speaker has been collecting designs of pieces of equipment which can be built in the school and become objects of help in the instruction.

The speaker is taking the initiative in changing certain trade conditions. Practically everything that is purchased in our public schools must be ordered thru a purchasing agent upon a requisition form. State law usually requires that a list of the articles specified be advertised or offered to the trade for bids and the lowest bidder presumably gets the order. This plan works all right in ordering concrete, coal, or gasoline, but it has resulted in great hardships to the physics teacher and is largely responsible for the presence in our laboratories of the large amount of junk. The selection in the past has been largely on a basis of cost. In future I want to see it upon a basis of quality.

School contractors are not selling to the schools commercial articles because school law and business conditions will not permit it. For example,

it is generally conceded that the biggest maker of standard quality electrical instruments is the Weston Electrical Instrument Co. of Newark, N.J. School law and school contractors have prevented these instruments from being commonly used in the schools largely because there was no money in the sale of them for school contractors. Tomorrow I shall meet the school contractors to announce to them a new policy of the Weston people which I hope will change all of this. Realizing that schools and school law are mighty difficult to change, I have gone to this $3,000,000 concern and changed their business policy.

I cannot refrain from illustrating how silly the laws can be. I am told that Ohio has a law which requires that no article can be sold to the state without a discount of 25 per cent being given. This requires that every concern doing business in that state must print a special price list to meet these conditions. Anyone who knows business conditions will appreciate that no large and reputable house is inclined to reorganize its sales system in order to sell a few small articles to the schools. I believe that it is impossible for the Ohio schools to buy direct from houses like the Weston Electrical Instrument Co. and many of the European instrument-makers.

Possessed with a meddlesome disposition, the chairman has taken up with various concerns questions pertaining to the sale of their regular line to the schools, and the manufacture in large quantities of special articles needed by the schools but now handmade in small quantities. More important than either of these, I have recommended the construction of certain articles not now in use but badly needed in our school.

The contract system of purchasing supplies has resulted in a cutthroat competition among apparatus dealers which has tended to reduce the cost and the quality of certain articles to such a point that many pieces sold are of little or no value. Now the committee proposes to establish a set of specifications for all articles used in the physics laboratory with the idea of establishing a standard of quality, which shall be recognized as adequate. We propose to maintain this standard under the protection of a trade-mark, after the plan so successfully adopted by the medical profession. At the meeting of dealers called for tomorrow, we hope to arrange many of the details of this trade-mark agreement.

Some small schools are practically without equipment because of the complete absence of any authoritative statement of what constitutes a satisfactory equipment and of what a minimum equipment for a given size school should consist.

In defining pieces in such equipment, a set of specifications is necessary. In making such an outline, our vice-president, Mr. Orr, has pointed out that great care must be taken to make it clear that no article is absolutely necessary, but the report should be known as a statement of what is good practice for a school of a definite type. The ideal course is adapted to local industrial conditions and to the mental development of the students.

Just as in medicine every case is a separate problem, so each school presents individual characteristics and needs which demand thoughtful consideration from the teacher. The committee must help without decreasing the independence of action of the teacher. A teacher good enough to be intrusted with our children should be at least equally trusted with the expenditure of public money.

Dr. Hedricks writes me that Dr. Claxton, of the United States Bureau of Education, will, under certain conditions, issue the report of the joint committee in bulletin form.

I have come before this meeting to ask the National Education Association to make the joint committee a committee of the National Education Association. We need your help in making our organization more representative, we need the authority which the National Education Association can give to our actions, we need funds to carry on the extensive correspondence which must be conducted in connection with this work. Pratt Institute is glad to see that the speaker has time for this work, but the present volume of correspondence is too great to be done without the continued help of a stenographer.

The expenses of student draftsmen to make tracings of designs for school construction must be met. Blueprints and circulars must be sent out to many who cannot be expected to pay for them.

The members of this committee are enthusiastic and very willing to work without pay, but they cannot bear the expense of the committee's affairs. The drafting of the set of specifications of the few articles selected for immediate standardization, the completion of projected designs, and the routine correspondence will require an expenditure of not less than $2,000. If the committee is to hold meetings to settle points at issue, an additional sum for traveling expenses must be appropriated.

Fellow-members of the National Education Association, I want to put this question to you: Are you willing to co-operate in the only organized work now being conducted for the improvement of physics instruction? Will you pass a motion to appoint a committee and recommend to the Council that suitable funds be appropriated?

A STUDY IN ADOLESCENT EFFICIENCY

J. H. McCURDY, M.D., DIRECTOR OF THE PHYSICAL DEPARTMENT, INTERNATIONAL Y.M.C.A. TRAINING SCHOOL, SPRINGFIELD, MASS.

This paper can serve only as a preliminary statement and illustration of a method of study. The writer began the heart rate and blood pressure section of the study at Clark University, in the fall of 1908. While a graduate student in the University personal observations of the Worcester, Mass., school boys, grammar and high, were taken. The study has been con-

tinued during the last four years with the aid of the following students from the International Young Men's Christian Association College: Messrs. Brock, Fette, and Yeager, 1910; Dittemore, Courleux, and Martin, 1911; and Deaver, Doane, Metzler, and Samson, 1912. Observations were made under the supervision of the writer on the Springfield, Mass., high-school boys. The items studied were heart rate and blood pressure, pubescence, height, weight, strength, lung capacity, and scholarship. In both cities the co-operation of the school officials made possible the study. The method of generalized study was discarded in favor of the individualizing method after the first year's study, when it was found that the generalizing method of study gave no evidence of an abrupt pubertal rise of blood pressure, as stated by Hall in his *Adolescence* and Tyler in his *Growth and Education*. The aim of the study during the past three years has been to follow the same boys during their entire period of maturing, with at least two examinations a year, rather than examining them for only one year. The generalizing method assumes that the boys who are, for example, twelve years old this year will be like the boys thirteen years old a year from date. This method has been widely used. Dr. Bowditch in his study of the Boston school children and Dr. Porter in his study of the St. Louis school children are well-known examples. The individualizing method follows the same boys during their entire period of maturing. This method has been followed by Crampton in his study of the New York City school children. Crampton's study indicates that there are differences in boys of the same chronological age.

The aim of this investigation is an attempt to discover the way boys mature and to relate that knowledge to methods of promoting their health and efficiency in school and in life. We should have norms of vigor which would give a fair index of the health and efficiency of the individual boy or girl. The school gives an index of the intellectual efficiency of the boy for those particular tasks. We have at present no common indices of vigor which are generally accepted. This study is an attempt to find such indices. It is, I think, the first attempt which has been made to correlate the factors of efficiency in the adolescent boy. The marks given in physical education practice are probably a closer index of motor efficiency than are the marks given in the classroom of intellectual efficiency but they have not received such general acceptance.

We need two new sets of indices: first, indices of the intellectual health and organic soundness and efficiency of the central nervous system; second, indices of organic efficiency.

It is generally recognized that the modern environment has affected unfavorably the health of the city dweller, if not that of one living in country places. While it is true that infectious diseases have decreased, it is also true that diseases of the nervous system, of the heart, and of the kidneys have increased. Dr. Garber states in *Current Educational Activities* for

1911 that an "experienced health officer asserts that 70 per cent of all children entering school are not physically what they should be." The environment and activity of children have markedly changed.

First, they learn by going to school, rather than by aiding their parents in their activities in the home.

Second, they use chiefly the highly specialized muscles used in speaking, writing, and close vision rather than the large muscles of the legs and trunk. School education has increased the use of the accessory muscles and decreased the use of the fundamental muscles.

Third, the central nervous system is asked to function chiefly in its higher activities rather than in organic work.

On the basis of J. Hughlings Jackson's three-level theory, which seems to be meeting with general acceptance by psychologists, we have:

a) A lower or organic level controlling circulation, respiration, and nutrition, largely thru the plain muscles and organic nervous centers, e.g., cardiac and respiratory.

b) A middle level, which might be called the motor and sensory level. This is most nearly illustrated by Flexing's motor and sensory region.

c) A highest level, represented in a general way by the association areas, which are still more complex and related to the higher intellectual processes and to moral judgments.

We recognize that the development of the higher centers is dependent on the proper development of the lower centers, that the health of the body is essential to the health of the central nervous system, but we often fail to see how intimate the relationship really is.

Centers for the simplest movement of the limbs become evolved in the higher centers into the physical basis of volition; centers for simple reflex actions of eyes and hands are evolved in the higher centers into the physical basis of visual and tactual ideas. The low-level centers governing the tongue, palate, and lips in eating and swallowing are evolved in the higher centers into the physical basis of word symbols serving us during abstract reasoning. The lowest-level centers, which control respiration, circulation, and nutrition, are evolved in the higher centers into the physical basis of the emotions.

The low-level or basal centers regulate the organic life, the high-level centers are related to the intellectual and emotional life. The higher centers are built upon the lower ones. Intelligence and morality are related to the physical integrity of the lower centers.

In searching for indices of vigor I have selected items which represent large organic efficiency in relation to maturity. The chief factors in physical efficiency are good organs, a stable nervous system, and a good environment.

I have taken the pubescent index as outlined by Godin,[1] Crampton,[2] and Marro[3] as the method of determining maturity. I have used the specific method of Crampton, whose three divisions seem more accurate than those of Godin or Marro. He divides the maturing boys as follows: P_1, pre-

[1] *Recherches anthropométriques sur la croissance*, Paris, A. Maloine, éditeur, 1903, chap. vii, pp. 180–87.

[2] *American Physical Education Review*, Vol. XIII, 1908, p. 143.

[3] *La puberté*, Paris, Schleicher Frères, éditeurs, 1902, pp. 530.

pubescents, those without visible hair on the pubes; P_2, pubescents or those on whom has appeared a fine growth of pubic hair with pigmentation; P_3, postpubescents, those who have the kink or twist of the pigmented hair. Godin gives the best description of the changes coincident with the appearance of puberty. Marro should be consulted in relation to the causes which retard or accelerate the appearance of puberty, such as climate, temperature, race, and hygienic conditions.

In the height and weight studies 212 boys were examined; 51 of these were examined five times between October, 1910, and March, 1912. The rest of the boys were examined in October, 1911, and March, 1912. The following tables show the growth rates:

AVERAGE GAINS, OCTOBER, 1910—MARCH, 1912, 51 BOYS

	Height	Weight
Prepubescents	2.8 in.	8.55 lbs.
Pubescents	4.46	23.03

AVERAGE GAINS, OCTOBER, 1911—MARCH, 1912, 161 BOYS

	Height	Weight
Prepubescents	0.73 in.	5.45 lbs.
Prepubescents changing to pubescents	1.25	6.92
Prepubescents changing to postpubescents	1.35	8.52
Pubescents	1.35	8.38
Pubescents changing to postpubescents	1.27	7.82
Postpubescents	1.04	6.6

There is a rapid increase in height and weight during the maturing period with a gradual decline after the maturing period.

The lung capacity studies show similar gains due to the degree and rate of maturing. Examinations were made of 179 boys with 157 of these carried over from 1910.

AVERAGE LUNG CAPACITY, OCTOBER, 1910—MARCH, 1912, 157 BOYS

	October, 1910	March, 1912
Prepubescents	125	136.6
Prepubescents changing to pubescents	145	177
Prepubescents changing to postpubescents	141	181.1
Pubescents changing to postpubescents	173	218

The following strength test table gives the differences between groups:

	Forearms		Shoulder Retractors
	Right	Left	
Prepubescents	50.3–56.6	42.3–49	27.7–36.6
Prepubescents changing to pubescents	53.3–64.8	49.9–56.8	34.8–39.5
Prepubescents changing to postpubescents	54.3–69.6	52 –61	34 –42.3
Pubescents changing to postpubescents	73.6–88.8	65 –85	46.4–57.3

The pubertal changes are more rapid in the summer; with this change comes a more rapid increase in lung capacity and probably in height, weight, and strength. In lung capacity, for example, if a boy changes from one period to another during the winter months he will increase his lung capacity 10–14 cubic inches; if he changes during the summer he will increase 20–28 cubic inches. It would be interesting to compare boys spending their summers largely out of doors and those spending theirs indoors.

The heart rate and blood pressure studies have been continued for four years, 1908–12. The following tables indicate the results of this study:

HEART RATE

Year	P_1		P_2		P_3	
	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
1908–9	77	84.8	70	75.5	67.5	83.2
1909–10	82.9	85.3	82.2	89.6	80.2	87
1910–11	80.9	90.7	83.1	94.1	81.4	92.6
1911–12	72.2	82.8	77.4	90.5	76.4	91.4
	82.6	92	71.8	87.8	74.8	89.2

The examinations were conducted with great care. The location of the examining-room reduced to a minimum the amount of exercise needed to get to the place for examination. Pupils were selected who had been seated in the classroom for at least an hour. Where there was any indication of accelerated heart action from exercise or from nervousness the pupil reclined for three or four minutes, or until all evidence of acceleration had time to disappear. The high heart rates which persisted were sometimes due to nervousness and sometimes to anæmia or general low vitality. Variability was markedly greater in the pubescents and postpubescents; that is, during the period of rapid change. High heart rates seemed to indicate poor condition. Heart rates with wide variations between the horizontal and standing positions seem indicative of poor vascular adjustment.

The writer was fortunate in the Worcester group in having several distinct classes of boys to study:

A. *Paper route boys.*—These boys covered from three to nine miles each day delivering papers, most of them before 7:00 A.M. They had lower heart rates than the average of their groups.

	Paper Route Boys		General Average	
	Horizontal	Standing	Horizontal	Standing
P_1, P_2, P_3	63.5	75.2	68.6	84.7
P_3	60.7	71.3	65.9	82.1

The variability between the horizontal position and the standing position of the P_1, P_2, and P_3 general average boys was 16.1, of the paper route boys it was 11.7. Of the P_3 general boys the variability was 16.2, of the P_3 paper route boys 10.6.

B. *Athletic boys.*—

	Athletic Boys		General Average	
	Horizontal	Standing	Horizontal	Standing
P_3	61.5	78.3	65.9	82.3

The variability of the general average was 16.2, of the athletic boys 16.8.

C. *Rapid growers.*—These boys grew in height from one to three and one-tenth centimeters in ten weeks. They show the following relations to the other groups:

HEART RATE OVER 80 BEATS PER MINUTE

	Horizontal	Standing
Rapid growers	30 per cent	90 per cent
Prepubescents	33	68
Pubescents	26	75
Postpubescents	(All below 80)	55

The rapid growers have on the whole the highest heart rate.

The systolic blood pressure studies conformed to the same conditions as those for the heart rate mentioned above:

Year	P_1		P_2		P_3	
	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical
1908–9	103.6	104.3	110.5	110.8	110.3	109.5
1909–10	111.4	112.7	121.1	120.0	123.0	121.1
1910–11	110.9	111.2	120.5	117.8	126.1	125.4
1911–12*	*106.0	107.7	106.6	108.7	110.2	111.06
	†106.6	110.3	109.2	116.7	116.3	122.4

*Technical High School boys. † Central High School boys.

The smallest range of variability is shown in the prepubescents. The pressures rise slightly in both the horizontal and vertical positions with the gradual maturing of the boy.

Low pressures (below 100) indicate a weak heart, weak peripheral resistance, or lack of splanchnic adjustment. The fall in pressure on changing from a horizontal to a standing position probably means lack of cardio-vascular adjustment (vasomotor tone). Low pressure (below 100) indicates lack of vigor. In high pressure (above 130) the examiner should find whether the kidneys are causing the high pressure. There is no evidence of an abrupt pubertal rise in blood pressure as stated by Hall and Tyler. With wide blood pressure variations in prepubescence (78–120 mm. Hg.), in pubescence (78–152 mm. Hg.), and in postpubescence (76–136 mm. Hg.), it seems necessary to conduct a series of experiments on the same boys for a series of years which shall follow their blood pressure changes thru the entire period from immaturity to maturity.

This summary represents four years of such study. The accumulation of data is slow because a portion of the boys begin their maturing in the grammar school; this increases proportionately the number of pubescents and postpubescents in the high school.

The pressures of the prepubescents, pubescents, and postpubescents range over the same general field, with the tendency of having the lowest pressures in the prepubescents, the highest in the postpubescents. Experiments should be taken at intervals short enough to determine whether there is a rapid rise at any time, and if such a rise occurs if it is in relation to pubescents.

SCHOLARSHIP IN RELATION TO PUBESCENCE

	Average grades
Prepubescents, Freshmen	75.1
Pubescents, Freshmen	70.8
Postpubescents, Freshmen	74.7

These average grades exclude the failures: the following table gives the percentage of failures in each subject.

PERCENTAGE OF SUBJECTS FAILED IN EACH PERIOD

	P_1		P_2		P_3	
	No. Examined	Percentage Failed	No. Examined	Percentage Failed	No. Examined	Percentage Failed
English	46	1.7	52	13.4	27	29.6
Mathematics	47	1.6	51	17.6	28	42.8
Science	29	0	23	13.4	28	12.5
History	46	0	50	12	28	0
Language	22	22.7	31	40	17	41.1
Total	190 (7)	3.6	207 (39)	19	128 (28)	22

	Total Subject Units	Total Failures	Percentage Failures
P_1	190	7	3.6
P_2	207	39	19
P_3	128	28	22

Of those securing passing grades the pubescents or those maturing most rapidly had the lowest grades. Among those who failed there was a

progressive increase in the number of subjects failed in. This was probably due to the duller boys being left behind, while the brighter boys were advanced to second-year work. The boys failed most often in English, mathematics, and language.

CONCLUSIONS

The most obvious needs are for standards of growth and efficiency which are related to the maturity of the boy rather than to his chronological age. An illustration from Deaver's work will make clear in a graphic way the difference between chronological and physiological age in relation to strength and lung capacity. The table shows the increases for approximately the same period:

Chronological Age	Physiological Age	Right Forearm	Left Forearm	Shoulder Retractors	Lung Capacity
13 years and 4 months	P_1	46	36	24	130
14 " 10 "	P_3	80	68	58	190
14 " 5 "	P_1	45	37	24	110
15 " 10 "	P_1	50	45	30	125

The younger boy is far ahead of the older boy in maturity and physical efficiency.

We have no accepted standards of growth or efficiency nor can we have them until growth studies have been followed thru with the same boys consecutively during the entire period of maturing. We need at least the following standards:

1. Normal standards in height and weight which are related to maturity. Crampton has shown that chronological age is not as good a basis for the study of height and weight as physiological age.

2. The work of the last four years has not conclusively disproved the commonly accepted pubertal rise in blood pressure as stated by Hall and Tyler. It is fair to say, however, that the evidence points away from any abrupt pubertal rise. The non-appearance of the rise which one would expect to come with the rapid increase in heart size in relation to the size of the arteries is probably explained by the peripheral dilation of the small arteries which keep down the pressure.

3. The present study points toward two conclusions in relation to scholarship:

a) A lower grade in pubescent Freshmen than in the prepubescent or postpubescent Freshmen for those who pass in their studies.

b) With those who fail there seems to be a progressive increase of failures from the prepubescents to the postpubescents, probably due to the leaving-over of the pubescent and postpubescent failures from other years.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

OFFICERS

President—WILLIAM WIRT, superintendent of schools ..... Gary, Ind.
Vice-President—HARLAN UPDEGRAFF, professor of education, Northwestern Univ. Evanston, Ill.
Secretary—WILLIAM GEORGE BRUCE, proprietor, *American School Board Journal*, Milwaukee, Wis.

FIRST SESSION—MONDAY FORENOON, JULY 8, 1912

The Department of School Administration was called to order by President Wirt in the South Parlor of the Palmer House about 10 A.M.

In the absence of the secretary, Frank M. Bruce was appointed secretary *pro tempore*.

The following Committee on Nominations was appointed:

H. B. Wilson, superintendent of city schools, Decatur, Ill.
Horace H. Cummings, superintendent of schools, Salt Lake City, Utah.
Charles A. Prosser, secretary, National Society for the Promotion of Industrial Education, New York, N.Y.

Mr. Wirt then opened the program with the president's address. He chose as his subject, "School Economy," which was introductory to the program planned for the entire session.

In the absence of E. B. DeGroot, superintendent of playgrounds and sports, South Park Commission, Chicago, Ill., who was to have spoken on "Educational Values of the School Yard or Playground," President Wirt briefly discussed this subject.

Charles A. Prosser, secretary, National Society for the Promotion of Industrial Education, New York, N.Y., then outlined "Facilities for Industrial Education."

Finally Edwin G. Cooley, Chicago, Ill., read a paper on "Continuation Schools."

SECOND SESSION—WEDNESDAY FORENOON, JULY 10, 1912

The meeting for this session was changed from the Palmer House to the Gold Room of the Congress Hotel.

William B. Ittner, architect, Board of Education, St. Louis, Mo., read a paper on "School Architecture," which was illustrated with stereopticon views.

The discussion which followed was led by Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind., and John Franklin Bobbitt, Department of School Administration, University of Chicago, Chicago, Ill.

THIRD SESSION, ROUND TABLE—THURSDAY FORENOON, JULY 11, 1912

The third session of the department was again called in the South Parlor of the Palmer House, as a Round Table session.

The following topics were discussed:

A. "Can the Administration Department of a School System Serve as a Laboratory for the Industrial Training of Children?"

B. "What School Facilities Should be Provided for Instruction by Means of Motion-Picture Machines, Stereopticon Lanterns, Phonographs, Player-Pianos, etc.?"

In discussing the first topic, G. E. Wulfing, director of industrial education, public schools, Gary, Ind., outlined the work done under his direction at Gary. He was followed

by Raymond Riordan, principal, Interlaken School, Rolling Prairie, Ind., who described the construction of his school from open farm country to a school city.

The second topic was introduced by W. H. Ives, Educational Department, Thomas A. Edison, Inc., Orange, N.J.

Frances E. Clark, Public School Educational Department, Victor Talking Machine Company, Camden, N.J., next showed the uses of the talking machine as an aid to the teaching of music, public speaking, etc.

Finally Agnes Benson, supervisor of music, public schools, Chicago, Ill., described her own use of the talking machine in connection with her work in the schools.

The nominating committee reported the following names:

For *President*—J. H. Francis, superintendent of schools, Los Angeles, Cal.
For *Vice-President*—C. A. Wait, president, Board of Education, Decatur, Ill.
For *Secretary*—Frank M. Bruce, publisher, *American School Board Journal*, Milwaukee, Wis.

The report of the committee was unanimously adopted.

It was next moved by H. B. Wilson, superintendent of city schools, Decatur, Ill., that the officers of the department be appointed a committee to consider the advisability of meeting hereafter with the Department of Superintendence during the winter. The work of the department of School Administration is associated very closely with the work of the Department of Superintendence. The resolution was unanimously adopted, and the meeting adjourned.

FRANK M. BRUCE, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

FACILITIES FOR INDUSTRIAL EDUCATION

C. A. PROSSER, SECRETARY, NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION, NEW YORK, N.Y.

In the discussion of the topic "Facilities for Industrial Education," the term "industrial education" as distinguished from "manual training" will be used as meaning a course of instruction for boys and girls between fourteen and eighteen years of age who, while being trained for good citizenship as well, are at the same time being prepared for successful service as wage-earners in agriculture, household arts, or industry. Wherever facilities for manual training or training in the practical arts as a part of a general education are discussed, this will be indicated.

Those who are attempting to bring about industrial training in their communities find themselves confronted with two great difficulties: the lack of funds and the lack of knowledge in this new field where the work is to a considerable extent yet experimental as to the kind of training which is necessary in order to fit boys and girls properly for wage-earning careers. School authorities find it almost impossible to secure funds which they need in order to meet the new duties and responsibilities in the general education of the child, which our day is thrusting upon them. This not only makes necessary national and federal aid to stimulate and encourage local communities everywhere to take up practical education, but makes it

necessary also that the work should be begun on a small scale and, unfortunately, many times without proper facilities for carrying it on successfully.

The course of study and the method of instruction in the work cannot be arrived at by the theory of the schoolmaster from within the school, but must be determined as the result of the study of the particular industry for which the school attempts to prepare the child. In many lines of industrial education today we do not know with sufficient clearness what should be given the child to justify us in carrying on the work on a large scale. We do know what should be done in training girls in millinery, dressmaking, machine-operating, and, to a considerable extent at least, for home-making. We do know what we should do in training boys for woodworking and metal-working. We do not know, for example, what we ought to do as yet in training children for textile-working and shoe-working.

These considerations make it necessary that school systems should proceed on an experimental basis in dealing with different new groups of children who are to be trained, and with new lines of industry which we have not yet entered with practical education. Only in this way can the school learn the kind of plant and equipment necessary in order to deal with the problem on a larger scale.

THE QUESTION OF THE PLANT FOR INDUSTRIAL EDUCATION

Sometimes the training is given in a separate school and sometimes in a department of the regular high school. Where the work is given in a separate school three kinds of plants are to be found in this country: the special building erected for the purpose, usually by an issue of bonds; the old factory building remodeled for the purpose; and the abandoned schoolhouse which has outlived its usefulness for general education and is remodeled to serve temporarily for industrial training.

Williamson Trade School near Philadelphia, the Wentworth Institute at Boston, which are private endowed schools, and the Worcester, Mass., Trade School for Boys and the Milwaukee Trade School for Boys, which are publicly supported, are quartered in special buildings built for the purpose. This seems to be a wise and safe course to pursue in cases where the local authorities are certain that they know just what kind of a building is needed to meet the local situation. It insures proper conditions for doing the work from the start. There is danger that the building will not meet the changing conception of the service which the school should give its pupils. Experience seems to show that where a special building is erected for giving industrial education it is advisable to build it one wing at a time, each wing being devoted to some one feature of the work, and wings being added from time to time which are adapted to meet the needs of the school.

The New Bedford and Springfield, Mass., independent industrial

schools and the industrial school at Rochester, N.Y., occupy old factory buildings which have been remodeled so as to provide for a time at least fairly adequate accommodations for the school. This method of housing the work is one which can be resorted to successfully in communities which are not yet ready to issue bonds in order to provide a special building or the school authorities of which have not yet determined just the kind of a plant they need to meet their changing ideas of what the school should do. The plan has some excellent features to commend it. The rent for the old factory is small. Plenty of floor space is usually secured. The school has from the start an air of reality and commercialism that appeals to many children who desire to go to work. Alterations in the building are readily and cheaply made. Alterations and additions to the building and the installment of fixtures and equipment afford an excellent opportunity for productive work of a kind not offered by the special industrial school building.

The factory building, however, is usually poorly adapted for school purposes. Sometimes the location is bad; usually the lighting is poor and the heating arrangements inadequate. Such buildings should properly be regarded as a makeshift or device to be used for a period of, let us say, from three to five years as the first step in the introduction of industrial education in the community.

The Newton, Mass., Lowell, Mass., and Somerville, Mass., independent industrial schools are quartered in old schoolhouses which have been remodeled. This method of introducing industrial education is good when the community is carrying on a small experiment or beginning in the work. The expense for rent of the factory or issue of bonds at a time when this might be burdensome to the community is avoided. School authorities are able to find out thru this kind of a small beginning what should be done on a larger scale with any kind of training. An opportunity is given to prove the worth of the work before larger public funds are asked for. Public sentiment is created in favor of the new kind of education and the public becomes accustomed to the presence of the new kind of education and the need of its adequate support by the community.

Abandoned schoolhouses, however, are poorly adapted to the work. The lighting is always poor; the rooms are not the right shape and size; the construction of the building is not adapted to the use of machinery; the building does not appeal to the children from any standpoint.

Experience shows that, on the whole, the best methods of establishing a school, in the order of their desirability, are:

1. The special school fully equipped.
2. The old factory building remodeled.
3. The abandoned schoolhouse remodeled.

The chances are that some of the states will attempt to solve the problem of industrial education in separate departments of the regular high

school. The Page bill, providing federal aid for vocational education, leaves it optional with the states in the exercise of their economy as to whether they use federal money for industrial training in separate schools or in departments of the regular high school, or in both. There can be no doubt of the fact that at the present time, because of the academic traditions of the regular high school, the chances for effective work in practical education are much better when it is given in a separate school with a separate principal, separate teachers, separate courses of study and equipment. It is probable that twenty-five years from now, as the result of the experiments that are now being carried on whereby standards in effective training are being worked out, many high schools will be able to do good work in fitting boys and girls for useful employment that will not be able to do so now. At any rate, there is great need of the development of liberality on the part of the regular high school in dealing with this problem and the approach to it should always be in the experimental spirit.

Where vocational training is attempted by the regular high school, certain conditions need to be created if the work is to be done successfully. The door of the industrial education department should be open to the fourteen-year-old boy able to take the course even if he has not graduated from the elementary school. He is the boy who usually is going into the industries to be a machinist, a carpenter, an electrical worker, a printer, and so on. In the development of the service to these wage-earners, the high school must learn to follow the boy to the industry and thru a part-time arrangement with the employer bring him back for a portion of his working week for the training he needs. In most places, at least, the teachers who give the instruction in such a department of the high school must be teachers with different preparation, experience, and sympathetic point of view from those who teach in the regular academic departments of the school. Teachers of industrial or trade work should have had successful experience in the occupation taught. Teachers of the technical and academic work should have had sufficient contact with the industries for which the children are being fitted to enable them to understand and to deal successfully with the kind of boys and girls they must handle. The academic work must be of an entirely different kind from that which is given to those who are fitting for college. There should be an absolute differentiation in the industrial or vocational training from that of the regular high school in all practical and technical work, at least. The departments of industrial education should be under a separate department head who is an expert in the work. He should be regarded as an expert by the principal of the high school and the superintendent of schools, and under him there should be a corps of teachers especially adapted for the kind of instruction which needs to be given.

While the children of the department of industrial education might well participate in the social activities of the school, the best results will

be secured where their training is given in a distinct wing of the building, erected or set apart for this purpose. The difference in the character of the work which they are carrying on requires such a separation for much of the day.

THE QUESTION OF EQUIPMENT FOR THE WORK

It is an unfortunate thing for an industrial school to have a complete building and equipment turned over to it at the outset. If the pupil is to be adjusted to meet the demands of the industry, his training must be real. If it is real, it must be given in a productive shop, making useful things that can be utilized in the school system or sold on the open market at or above the market price. Schools giving training in such subjects as woodworking, metal-working, electrical working, can readily find use for the work of the pupils either in the building itself or in the school system. Every school should make a part of its own equipment. This has been done by most of the industrial and trade schools. Enough equipment ought to be bought at the outset to start the work. Sometimes an equipment sufficient to give the first year's training is bought, after which the pupils are able to make most at least of the tools and machines and facilities necessary for their further training in the following years.

Where schools find themselves with limited resources at the start, much second-hand equipment for use in the first year of the work, at least, can be bought that will serve its purpose well. In the other years of the course, it is necessary to secure the very latest and best machinery so that when the boy leaves the school he will be familiar with it and can take his place in the shop successfully.

One of the handicaps under which the school shop must always labor is that of keeping its machinery from time to time fully abreast of the best equipment of the commercial shop. It is doubtful whether this can be done altogether successfully. Under the stress of competition, the commercial shop changes its equipment from time to time. The school, without such competition, is very likely to remain content with machinery that is behind the times. This is one of the strongest reasons why the part-time scheme of education that enables a boy to get the most of his practical training in the industry itself promises to be most effective in dealing with the great body of wage-earners between fourteen and eighteen years of age.

Many enthusiastic supporters of part-time education have been led to claim that all the equipment the school needs in dealing with the wage-earner for the time which it demands away from the shop work is a teacher, a textbook, a blackboard, and some desks. In their enthusiasm they fail to recognize the conditions under which most of those who are employed in the industries labor. Large-scale production, extreme division of labor, and the specialized machine have supplanted the artisan or tradesman with

the machine worker. The old trades in which men were able to get experience with all the different tools, machines, and processes of their callings are rapidly disappearing. Modern industry does not give the worker a chance to get a broad experience in working with different machines. The typical boy who comes to the part-time school will be one who is spending his entire time at one machine, making one small part or portion of the final output of the factory.

The school must always take the boy as it finds him and give to him the training he needs. In giving part-time instruction to the worker at the specialized machine, the school must under the school roof, if it is to meet modern industrial conditions, provide a sufficient amount of equipment to enable the boy to get the elementary practice and experience at the machines and with the tools and in the processes which the shop denies him and which are necessary to his insight, interest, and growth in the occupation. Every experience goes to show also that a minimum amount of equipment under the school roof is necessary as a teaching device which will make it possible for the teacher closely to correlate or connect the instruction which he is giving with the shop processes as they can be illustrated on the machines.

One great mistake which many manual-training and technical high schools have made, and which industrial schools are in danger of making, is that of providing a large number of tools and machines of one kind rather than a smaller number of different tools and machines. There are manual-training and technical high schools in this country where in order to carry on the teaching of pupils in groups enough metal lathes have been secured to provide one for each pupil in the largest section which the school handles. This policy requires both an enormous building with many different shop rooms and a large outlay of money for equipment for the work, much of which is unnecessary, and dooms the school forever to a system of training where the pupil is taught by the exercise rather than the job method, where individual instruction has no place, and where the pupils are handled entirely in groups. The same amount of money put into a more varied equipment would enable the school, whether it be a manual-training school or industrial or trade school, to deal with the pupils individually so as to give each a wider range of experience with different machines, to substitute the individual for the group method of instruction, and to approach more nearly the conditions of real shopwork so necessary in the proper training for success in the industries.

Many are coming to believe that training in the practical arts for boys and girls between twelve and fourteen years of age in order to uncover taste and ability is a necessary part of a program of vocational guidance and direction. If children are to find out what they would like to do, and what they are fitted to do, this training in the practical arts should during the two years of from twelve to fourteen bring the children in con-

tact with experiences drawn from many different callings. A course in woodworking alone only determines whether or not the boy would like to follow woodworking and whether he could do it successfully. The same is true of a course in metal-working alone. The school day should be lengthened and not less than three hours per day given to training in the practical arts in which the boy is subjected to a series of jobs, projects, enterprises, or experiences drawn from woodworking, metal-working, electrical working, printing, bookbinding, gardening, leather-working, clay-modeling, etc. This work should be given, not with the expectation that it is to meet trade standards, but for the purpose of giving the boy an insight into the occupations among which he might choose a life work.

If such a scheme as this were carried out, instead of having a carpenter shop filled with carpenter benches and a printing shop full of printer's cases the school shop would be equipped with a small number of tools and machines necessary to give in an elementary way experiences in different occupations, and the progress of the boy thru the work would be stated in terms of experiences which he would carry on individually, drawn from these different lines of employment. Such a varied equipment would not take any more room than that now occupied for straight courses in wood or metal and would cost no more than the amount which is now devoted by school authorities to the purchase of duplications of the same kind of equipment for some one line of work which does not provide any test of the pupil outside of that one line and which does not afford any data upon which an intelligent choice or advice could be given to him at the age of fourteen when he is facing the question of what he shall do.

Doubtless in these early years of its growth industrial education will have a difficult time to secure its fair share of money necessary in order to secure the proper plant and equipment. If the public wants schools that will better serve the needs of its children, it must give more money by taxation for their support. When the public comes to feel, as it is coming to feel strongly, that it is not only as wise but as equitable to train the many for successful service in life as it is to train the few for professional and technical leadership, it will find the way and the means by which vocational education will receive at least as liberal support as that which has been given to the general education of those over fourteen years of age who are fitting themselves for college and professional careers. It is probably fortunate at the present time, when industrial education is finding its field and the kind of training it is to give for different callings, that it is being checked in a too rapid development, which would be fatal to its final success, by the lack of large resources with which to carry on work that now needs to be approached carefully, cautiously, and experimentally.

CONTINUATION SCHOOLS

EDWIN G. COOLEY, CHICAGO, ILL.

There are two propositions upon which my whole argument depends. These are as follows:

I. The state possesses no higher treasures than the moral and intellectual powers of its youth. This applies to all classes of youth whether destined for the trades or the professions. As the Germans say: "No nation can take and sustain a prominent place in the modern world that fails to develop and utilize the powers and ability latent in all classes of its people."

II. "No boy or girl ought to be treated," as Winston Churchill says, "merely as cheap labor. Up to eighteen years of age every boy and girl in the country school, as in the old days of apprenticeship, should be learning a trade (or vocation), as well as earning a living." No person should be permitted to employ the boys or girls during these formative years without assuming some responsibility for their learning a vocation.

I expect to show that these propositions require the addition of a new type of school to our system.

A complete school system in a modern industrial state should include:

I. A system of elementary schools, including kindergartens, which covers the period from infancy and childhood up to the age of fourteen or fifteen. The work of these grades should be mainly cultural. It should include training of the eye as well as covering the ordinary academic ground in the fields of literature, geography, history, and the three R's.

II. A system of secondary schools, both academic and technical, for youth who can devote more time (*a*) to their education before entering business or industrial life, or (*b*) to the preparation for the university.

III. A system of higher institutions which prepare for the professions, such as law, medicine, engineering, etc.

IV. A system of vocational continuation schools, part-time and full-time trade or technical schools for youth who wish, or are compelled, to enter vocational life without the training provided by the secondary schools and universities.

The first three classes of schools are fairly well provided for under our present arrangements. Doubtless improvements will be made in each of these with a view to bringing them into a closer touch with the life-conditions of the present time. These improvements can be made without an overturning of the present school system, and should be the result of evolution rather than revolution. The work of the fourth class of schools is almost wholly unprovided for by our present educational system.

A fundamental defect in our present school system results from our custom of terminating compulsory school education at fourteen years of age. Everyone will admit that this is too early. We contribute to the support of the public schools on the ground that they are necessary to the perpetuation of our free institutions. We urge that a certain minimum of instruction and training is indispensable as a preparation for citizenship, and that the training of character connected with the minimum is of great importance for this preparation. We are permitting our boys and girls to

leave our public schools at fourteen, just at the time when they most need guidance and instruction, just at the time when character-building really begins, and just when they should be objects of special attention in our educational plans. Before the age of fourteen the youth is too immature to comprehend the training required by a citizen in a modern state. He has not the judgment and power of resistance to temptations necessary for an independent life in modern society. Our school training, therefore, is not carried far enough at the present time to reach its real aim, to provide instruction and training necessary for the solution of the problems of everyday life. Further, the youth who leaves school at fourteen loses and wastes almost the entire results of his eight years in the elementary school before he is of age.

The necessity for carrying forward the school instruction beyond the years of compulsory attendance is becoming more and more urgent. The transformation of the social body, the rapid transition of our people from country life to city life, the development of the industries and commercial activities demand more from the school than they did in the past.

The home has ceased to exercise the educational power which characterized it in the past. It has ceased to be the workshop of the parents; the father and often the mother are frequently taken from the home by their daily work. The old work-community of parents and growing children has disappeared. The great cities and the great industries now take the youth almost immediately after the completion of the elementary-school period. It is clear that great demoralization will take place if the care of society and the state does not take the place formerly occupied by the home, the parents, or the master in the trades.

The demands on school education are, therefore, increasing with the advancing development of society. Life in the great cities with its complicated relations, the industries with their many demands on manual and intellectual skill, the new forms of business life place everywhere higher demands on school knowledge and dexterity than the old simpler relations did. An increasing attention to the spiritual interests during these years of youth must be provided if the life of the modern laborer is not to be utterly demoralized and degraded by the sensual allurements of modern city life. Naumann, a distinguished German writer, says:

> Industrialism will become a system of slavery if it is not supplemented by the education of the masses. Only in this way can we develop an enduring human civilization.

Our school system is an evolution. It would be difficult and is unnecessary to trace all of the steps by which man has passed from a situation where education was almost exclusively an affair of the home to the present time where nearly every phase of it, from the kindergarten to the university, has become an affair of the public and of the state. This movement has finally begun to affect vocational education in all its branches in the leading civilized communities of the world.

It was natural that the higher education demanded as a preparation for the learned professions of law and medicine should be the first to be provided at public expense. The home manifestly can do little toward meeting this demand. However valuable the training of young lawyers, doctors, and ministers in the office may be, it is insufficient to meet the wants of our professional classes today. The state provides, therefore, university departments of law, medicine, engineering, etc.; it opens hospitals for the practical experience demanded by the young physician; it recognizes the obligation of the state to provide adequate educational opportunities for all the professions found in modern society. The number of these professional schools is increasing every year.

The same tendency exists in the humbler occupations, the trades, and even in the practice of domestic economy in the home. Home education is ceasing to be able to grapple with these problems; even the master's shop is now becoming inadequate, where it can be appealed to at all. Society must take charge of the vocational education of all classes and not ignore the changes modern life has produced in the education furnished by the home.

The nineteenth century has made the old elementary school, which was often nothing but a reading-school or a school for three R's, a real educational institution for the people. As Friedrich Paulsen says:

> It will be the mightiest problem of the twentieth century to build upon the elementary school as a general and fundamental form of school a new finishing educational institution, or to give to the elementary-school instruction its necessary conclusion in a kind of vocational high school, a school whose problem will be the carrying forward and making fruitful of the general education for vocational activity.

The course of education for every position in life should include two grades. The first is the elementary school, whose problem is—apart from the development of the intellectual powers—to provide exercises in the school arts which every successive instruction presupposes and makes use of. In a democracy this elementary course should be the same for all, and can be communicated to all divisions of the people in one common institution—the elementary school. The second grade has as its problem to advance the general education of the pupils in accordance with the degree of existing financial means and mental powers, and to give real vocational education. This is true of the so-called learned occupations which demand a real scientific training as a preparation for a profession. This is provided by the universities, and the various sorts of technical and commercial colleges, and by our secondary schools. To be fair to all, modern conditions require another type of school which, like the other schools, presupposes the general training given in the elementary school, but which has as its problem the training for the vocational life of the youth who must leave the ordinary school at fourteen years. This training on the immediately practical, technical side may fall to the vocations themselves, but a school must be

provided to supplement this shop training by supplying the knowledge and skill demanded by modern business or industrial life. This school is the school now known as the continuation or part-time school.

Care must be taken, however, that this new independent type of vocational school which takes the youth on leaving the elementary school not only provides a practical vocational education, but also considers the needs of the man and the citizen. The vocations, however, will stand as the central point of this system of instruction as the occupations of man stand as the central point of every well-regulated life and exercise a reaction upon all the remaining human activities.

Nevertheless it should be emphasized that the problem of this new school is to provide an education for citizenship, remembering that a good citizen must necessarily be able and willing to earn a decent living. We cannot leave the instruction concerning the public duties of man exclusively to party eloquence or to the daily press. This work cannot be done in the elementary school on account of the lack of maturity, experience, and power of comprehension of young children before the age of adolescence. The boy, however, who enters into practical life is immediately attracted by questions of citizenship, and comes to such instruction with all sorts of practical questions. He now has an interest in these questions, and an understanding of their significance which was impossible during the elementary-school period. If this instruction can grow out of concrete facts, and experience can be related to the rights and duties of the pupil himself, we shall succeed in utilizing this interest. In this course we should include some study of politics, of the position of our country among the nations of the earth, of our possessions, our power, our productions, and our commerce.

We must not forget that such youth are still boys and girls with an interest in amusements and activity of various kinds. Play and excursions, evening entertainments, and festivals should be carried on in connection with their school work, as they are now carried on in connection with our secondary and elementary schools. Libraries and reading-halls should be provided for such continuation schools, and the wise use of books will be a most important function of the teacher in such institutions. Such schools should be supplied with playgrounds, library halls, collections of tools, books, and apparatus, and we should encourage the union of former pupils with the students in the continuation schools. Our problem is with the whole boy, and we must not neglect his recreation. These continuation schools must be complete schools undertaking so far as possible the training of the whole boy, and not the producing of cheap skilled labor for the employer.

These schools are not continuation schools in the sense of being places where the instruction of the elementary school is continued and reviewed, but a continuance of the boy's education under new conditions and with a

new point of view. We have up to the time of entering these schools taught subjects, have provided general training, which it was hoped would be later applied to special cases. The continuation school reverses the process and follows the maxims, "Try to expand from your own center," "Proceed slowly step by step in your own way, from the individual to the universal." This means a change of attitude that will profoundly modify instruction in other schools.

These schools must not be confused with evening schools which have continued and supplemented our former education. These new schools must have their own organization, their own corps of teachers, and day instruction in suitably equipped school buildings. In the most progressive German cities they have their own buildings, corps of teachers, branches of education, and all that goes with an independent school.

There is no lack of interest and power for the carrying-out of this ideal among our people. There never was a time when the interest in education agitated the people more powerfully than today. There never was a time when the so-called upper classes felt more fully their obligation to extend the hand to their brothers below to bring them up to a higher and richer life.

This supplement to our educational system is necessary. As Friedrich Paulsen says:

> The education provided for our youth may be compared to an abandoned ruin: the foundation is laid, a few walls are constructed, then the work is left to the destruction of wind and water.

Our school system can be regarded as finished only when we provide an instruction for all that will fit them for the activities of real vocational life.

SCHOOL ARCHITECTURE

WILLIAM B. ITTNER, ARCHITECT, BOARD OF EDUCATION, ST. LOUIS, MO.

School architecture received its first healthy impulse thru the work of Mr. Edmond Wheelright, city architect of Boston from 1901 to 1905. The new school buildings he erected, the publication of his work on school architecture, and the continuation of a well-defined policy in the planning of school buildings by the Boston Schoolhouse Commission, which succeeded him, have resulted in a general improvement in school buildings thruout the country.

The work of the architects of the school systems in the cities of New York, Chicago, Cleveland, and St. Louis, persistently carried out along consistent lines for a number of years, together with the Boston work, has tended to a standardization of the problem, until at this day it might fairly be said that there is no excuse for an improperly planned or poorly constructed school building. Yet, in spite of this, buildings are constantly being erected which give little or no evidence of a knowledge of the subject and its fundamental principles on the part of their builders.

The intense commercialism of our times has brought to the highest state of development our mills, factories, office buildings, and the like, but school buildings, tho playing the most important part in the development of our people, have been, and still are, in a great measure, sadly deficient. The late Edward Atkinson, our most noted authority on fire prevention, stated that "in 1899, 485 college buildings and schools were burned, or 10.46 per week, and the rate of destruction is increasing." "I have examined several college buildings, memorial halls, and the like," said Mr. Atkinson, "and have never found a class in which heavy damage or complete destruction had been more adequately provided for by the masters of combustible architecture."

Mr. Franklin Webster, editor of the *Insurance Press*, in a recent edition stated:

> School fires are almost unpardonable, and they are likewise almost typical in American cities. Warnings have been numerous, without the disaster in Collingwood, but that disaster aroused everyone on the subject, and immediate investigations were begun in cities thruout the country. From reports that have been completed, it is evident that conditions are sufficiently dangerous to warrant the assertion that protective appliances are needed in the schools in each city in the United States.

The investigation of the condition of school buildings has, in some cases, brought substantial results. The result in a great number of cases, however, has been more in the direction of means of escape from fire, and legislation to enforce the same, rather than in safe building and permanent improvements looking to fire prevention. Boards of Education, yielding to popular demand and the clamor of the public prints, have been satisfied to erect on buildings with questionable means of exit and inadequate stairways one or more fire escapes, which are felt to be all that is required for the safe handling of the pupils in case of fire. The success of such means of exit, when the trial comes, and the pupils are in panic, is very questionable. After an exhaustive study of the matter, the best authorities agree that there should be no fire escapes on the ideal school building, but that ample and well-located inside stairways, properly isolated from the building which the pupils use daily, are the only safe and proper means of emptying a school building promptly and with perfect order, and that this, together with making the buildings, both old and new, immune from fire thru the intelligent application of modern methods, should be the aim of all school authorities.

However, alarming as these statements appear to be, such conditions are rapidly disappearing. We are no longer satisfied with the buildings of twenty years ago. This is the age of great activities in education, and the extended use of the school plant both day and night, and for all sorts of social betterments. Manual-training and technical courses are being introduced, demanding power plants and special equipment; the playground is in demand for constant use; in almost every community movements for educational and social betterment are under way, and the school, being

the logical center for such activities, must improve and enlarge to meet the greater demand.

The last report of the Bureau of the Census gives the expenditure for school buildings and grounds for the year 1908 as $197,000,000 for cities of over 30,000 inhabitants (only 168 in all). The responsibility for the expenditure of this vast sum rests fairly on the shoulders of their boards of education and those employed by them. The architect, therefore, is one of the principal agents for the wise application of this expenditure, and in just proportion to his skill and knowledge will the conditions brought to our attention by the underwriter experts be eliminated.

In the consideration of the more complex problem, therefore, the safety of our buildings must be carefully studied along with the great educational need, to the end that they shall not only fulfill these functions in a satisfactory manner, but that they shall also be representative of the intelligence of the community in which they are built.

It is held by many that the proper protection against fire can be had only thru the use of fireproof material; but all school buildings cannot be erected fireproof, nor is it necessary that they should be to make them safe, if proper methods of construction are employed. Where funds will not permit the erection of a fireproof building, it will require but a small additional outlay to fireproof the corridor floors and stairways; nor is it necessary to erect separate buildings in which to house the heating apparatus as this, at small expense, can also be isolated in a manner to eliminate all danger.

While buildings should be erected fireproof whenever funds will permit, and while this practice should be encouraged generally, the safety of our building depends quite as much upon the location of its stairways, corridors, and the exits, disposition of the rooms, its height, and the site upon which it is located. Let us then study at some length these important considerations.

The schoolhouse should be so located as to make it easily accessible to the greatest number; if possible, it should be at the very center of the school population, but this consideration is not of such importance as to lead to the selection of a site which is cramped in size for the building to be erected, or one that is low, poorly drained, hemmed in by other buildings, noisy, or otherwise undesirable. The distance some of the pupils are required to walk to reach the school is of small consequence when weighed against pure atmosphere, beautiful environment, and the absence of noise and dust. While there is little excuse for the selection of an improper site in small towns and suburban districts, the problem when applied to our large cities often presents obstacles apparently insurmountable, but even in such cases, the improved facilities for transportation and the ease of reaching the school furnishes the means of placing the building in a desirable location.

The site should be of such dimensions that the building is reasonably safe from damage from adjoining structures; the necessity for proper lighting in itself should demand a large site, insuring such isolation.

Authorities agree that the minimum allowable area for a site, after deducting the area of the building, planted and other restricted areas, should be 30 or 40 square feet per pupil. This will insure proper light and air, but very restricted playground, and such limitations are necessary only in the congested parts of our large cities. One hundred and fifty square feet per pupil may be taken as a working standard in cities, while ten- and twelve-acre sites may be considered ideal in suburban districts and small school communities.

There is a great diversity of opinion on the orientation of the building. Where other conditions do not interfere, an eastern or a western exposure for the classroom is preferred rather than the north or south. In Prussia a northern exposure is now the rule. While north light is the most diffused and the softest, and the best for art rooms and laboratories, it is better practice to place the classrooms so that they will receive sunlight during some portion of the day, but even this rule should permit of modification in southern climates, where north windows are desirable for summer ventilation.

The building should be low and preferably not more than two stories above the basement. This, of course, is not possible in the large cities, where buildings of three or more stories are required to provide the necessary accommodation. Such buildings are rendered safe by reason of adequate stairways and exits, and the most modern fireproofing methods, but they are the exception and not the rule, and we will address our remarks to general practice and not to special problems.

If large in plan, the floor areas in the building should be reduced by masonry walls, thus limiting the area open to fire. In plan, the stairways should be ample in number, should be located in a manner to reduce horizontal distance from classroom to exit, and the exit should terminate at the street or yard level, and practically outside of the building in order to obviate passing thru halls or corridors before reaching the open air.

Basements or cellars, as well-known fire-breeders, should not be found in buildings designed for the highest degree of fire protection. A better practice is to make this story practically level with the grade, dignify it by calling it the ground floor, and provide it with a window surface equal to or approximating that of the classrooms above. But in any event, it should be completely isolated from the rooms above and particularly that portion containing the heating apparatus. Such a story provides, at the least expense, the space for the heating and ventilating plant, playrooms for inclement weather, the general toilet and bathing facilities, and rooms for manual training. Such stories should be not less than twelve feet high—fifteen feet would be better to allow ample space for heating and ventilating ducts, and the floor itself should be not more than three feet below grade.

The boiler-room, fuel-room, and room for the heating apparatus should be cut off effectually, and all should be inclosed in masonry walls, fireproofed

at the ceiling or floor above: the best practice precludes any doorway from these rooms to the remainder of the basement, and while this may prove of some inconvenience to the janitor, it provides maximum safety; such doorway, if one is provided, should be a standard, automatic-closing fire door.

Next to the isolation of the basement and the inclosing of the stairways, in importance, is the avoidance of all hollow spaces in the walls and ceilings thru which fire may find its way to the various parts of the building. Wood furring, sheathed walls, ceilings, and wainscotings should be entirely excluded. Wood finish should be reduced to the minimum, all dark corners and closets likely to accumulate rubbish of a combustible nature should be eliminated. Doorways from wardrobes to corridors should be eliminated; a single door opening outward should connect the classroom and corridor, and should always open in the direct line of travel to the stairway. The single door, though not in general use, has the advantage that it will enable the teacher to control her pupils when there is a tendency to panic and march them to safety. In no case should doors be arranged to open directly onto stairways, or be hung in a manner to obstruct the traffic in the corridor.

Such stairways from the upper floors, to the ground floor as are necessary, should be inclosed in incombustible materials with proper fire-protected openings. No single requirement, save perhaps, protected stairways, is more important than the isolation of the basement.

Stairways.—Stairways in proper number should be provided and no stairway should be more than five feet in width; they should always be in two runs from story to story; should have broad landings, and there should be a handrail on the balustrade as well as the wall. Such a stairway will enable two files of children to go down abreast without pushing or crowding, and in perfect order.

The location of stairways is a matter of great importance. They should be separated and arranged to serve definite groups of rooms, with direct line of travel from classroom to stairway; thus a natural division of students is formed and congestion avoided. A closed balustrade of proper height is to be preferred to the open balustrade or boxed-in type of stair.

The number of stairways and exits in a school building is a matter of calculating accommodations for the number of persons and the number of floors to be served. It is a problem for the individual building, and all that can be given is a working-rule suggested by practice and experience, namely: that 120 persons in lines, two abreast, can pass a given point in less than one minute. If, therefore, stairways and exits in sufficient number are introduced and properly placed to empty our building in three minutes, or less, we are entirely safe. Risers should never exceed $6\frac{1}{2}$ inches and the tread should never be less than 10 inches—12 inches is better—and they should have a non-slipping surface.

In the matter of stairways and exits, the use of what is customary by the pupils a number of times each day during the entire school year will always prove the most efficient means of egress in any emergency.

Corridors.—The importance of the corridors or halls in the planning of school buildings is very often overlooked by school authorities, and in a great many buildings their width and natural lighting are sacrificed in the interest of additional classroom space.

They must be wide enough to prevent congestion, and, while no fixed rule can be laid down, it may be said, in general, that for main corridors 12 feet may be taken as a minimum, with 8 feet for side or secondary corridors, for grammar schools of moderate size; while 14 feet and 10 feet would be better. In high schools the minimum width for main corridors would be 14 feet.

Properly planned and lighted corridors offer the best means for decoration with pictures, casts, and mural paintings, and the educational value of these influences cannot be overestimated.

The practice of lining the corridors of a school building with open wardrobes, even tho they may be fairly well lighted, is open to enough objection to render the practice obsolete.

In this country it is almost universal to flank the two sides of the corridor with classrooms and depend upon the classroom doors and transoms and windows at the ends for light. In Germany the prevailing custom places the classrooms on the one side only, giving direct outside lighting in the corridor. While the American custom gives a more compact and economical building, it is accomplished at the sacrifice of proper lighting and attractiveness, and is one of the weakest points about our school plan.

Class units.—A school building consists of a number of class units grouped around corridors and stairways. No steps can be taken, therefore, in planning our building until a definite conclusion has been reached as to the size and number of these units.

Great stress was placed by early authorities on the number of cubic feet of air and floor space per pupil, and classrooms were thus proportioned. This, thru the introduction of mechanical ventilation, has given way to a practice where the number of pupils to be accommodated, the style of furniture to be adopted, and the proper lighting of the rooms are the factors in determining its size.

The number of pupils per room is constantly decreasing, and where fifteen years ago it was not uncommon to find as many as fifty-six to sixty-five pupils per teacher, the number today is from forty to fifty; and where 28 feet was a common width, the modern classroom has been reduced to a width of 24 to 25 feet, or less, as it is obvious that for a given story height the narrower the room the better its lighting. A room, therefore, 24 feet wide and 32 feet long will seat fifty pupils in single desks, give proper width

for aisles, and space for teacher's desk, a table, bookcases, or other furniture at the teacher's end of the room.

The width of the room, where unilateral lighting is used, should never be more than twice the distance from floor to window top, and where the external condition is not favorable this width will be found too great.

German authorities agree that the width of a room should be not more than one and one-half times the distance from floor to window head, but our latitude is more favorable for proper lighting than that of Germany, and our room will permit of greater width. The height, then, should be sufficient for good lighting, but no more, as added height is extravagant both as to first cost and as to maintenance.

Experience has shown that a height of $12\frac{1}{2}$ to 13 feet for a room 24 feet $\times 32$ feet will permit adequate glass area and may be taken as a standard where outside conditions are normal. The net glass area will depend upon the latitude. Where it may be necessary to make it as much as one-fourth the floor area in northern latitudes, this will be entirely too much in the South and Southwest, where one-sixth the floor area may give proper lighting. The story height to be adopted, therefore, depends more or less upon local conditions and must receive careful consideration.

In secondary schools the size of classrooms may vary in accordance with the demands made upon them and no definite rule can be laid down; they should, however, be as small as their uses will permit and lighted on their long axis only.

Grouping of rooms.—Having determined the size of the class unit, the next important step is their grouping with corridor and stairways. The most common type of plan places the rooms on either side of the corridor, with the stairways at the ends, and where this arrangement is the most economical in cubical content the corridors cannot be properly lighted, as they receive direct light from the ends only, and should an assembly room be introduced, the circulation of the corridor is entirely lost.

A common modification of this plan places the stairways on the sides and has the advantage of bringing them in better relation to the rooms, gives somewhat better lighting, but increases the area per classroom in proportion to the total floor area of the building. The plan improves in its perfect lighting, however, as the corridor is opened up to outside light.

The question, then, would be: Does the improved lighting warrant this increase in content? In my opinion it does.

The advantages of the open-type plan is well recognized abroad as the plan of School No. 204 at Berlin, Aarau, Switzerland, the Girls' School at Paris, the school at Stockholm, Sweden, and one at Hildesheim, Prussia, and all of these plans are recommended for serious study by school authorities.

In planning high schools the size of the class units cannot be standardized, as they must vary to meet the requirement, and no definite rule can be laid down. The high-school plan is further complicated by the intro-

duction of special rooms, such as science laboratories, study-rooms, commercial rooms, and art rooms, domestic science rooms, manual-training shops, etc., and before taking up the plan of the secondary schools, it may be well to consider, briefly, the requirements of the special rooms.

SPECIAL ROOMS

Laboratories may receive their light from two sides if desired, as the pupil has opportunity to adjust his position to the light, a condition which is lacking in the grammar-school room. Oblong rooms with approximate dimensions of 21 to 30 feet in width and 45 to 60 feet in length are better than rooms of square dimensions. The equipment should be so arranged that the pupil faces the instructor, and receives the maximum amount of light from the left.

Laboratories should open *en suite* with lecture-rooms, which should be arranged with raised tiers of seats fitted with tablet armchairs brought as close as may be to the instructor's table. In the absence of the lecture-room, sufficient floor space should be allowed at the instructor's table in the laboratory for the massing of the pupils during demonstrations.

Each laboratory should have its instructor's work- and storeroom. This should be well lighted, ample in size, and fitted with workbench, sink, and storage cases for the more delicate and valuable apparatus. For chemistry and physics a dark room should also be provided.

The students' tables in the chemistry laboratory should be provided with sinks, gas hoods, and reagent racks. A small conservatory for both botany and physiology laboratories will be found helpful to house and germinate the water plants and animal life used in the laboratory.

The instructors' tables should be fitted with sinks having a wood cover; there should be a sliding blackboard and each laboratory and lecture-room should be equipped with a lantern for lecture use.

Physics, chemistry, botany, and physiography laboratories should be equipped with gas and hot and cold water. Physics and chemistry rooms should also have electric outlets at all tables.

Each laboratory should be provided with a sufficient number of wall-cases to house the apparatus. They should be designed for their particular uses and in standard units if possible. Students' individual working tools are best stored in drawers in the workbench or table. A notebook case with writing-top will be found a valuable addition to the physics and chemistry laboratories.

Commercial rooms.—In a fully equipped school, a business and type-writing room will be found necessary. The equivalent of three class units will be necessary for this purpose. The business room may be fitted with specially designed desks, or, in a more modest equipment, the ordinary single pupil's desk will be found to answer the purpose. Space should be provided for the bank and business houses behind screens with pass

windows and standing desk. A storage case should be provided to hold the blanks used by the students.

The typewriting room should be fitted with the necessary number of typewriting desks and the space may be economized by grouping two or more students at a single table.

Drawing.—The freehand drawing and art rooms should occupy the space of two or more class units. They should receive north light, preferably thru a toothed skylight (studio light) with its base about 6 feet from the floor. They should be equipped with storage case for the pupils' drawing-boards and materials, adjustable drawing-tables, small tables for still-life subjects, a model table for life-posing, zinc-lined storage case for modeling clay and work, and a sink with hot and cold water. A cork panel on the wall opposite the skylight will be of aid to the instructor in arranging and criticizing class work and for exhibitions; the best grades of cork carpet answer the purpose admirably.

Mechanical drawing is required of all students in manual training, and the equivalent of two class units will be required. They should be well lighted and equipped with drawing-tables, drawing-boards, and tools. An economical method of storing the same is effected by a specially designed drawing-table holding the boards as well as the student's individual tools. There should also be a large table with drawing-top and drawers and a blueprint frame.

Domestic science.—This department will require a room for cooking, with storeroom, one or preferably two sewing-rooms with fitting-rooms, and a laundry. These rooms are best if conveniently grouped with sunny exposure and good light.

The cooking-room should be of ample proportions (about one and one-half class units will suffice) and should be equipped with a cooking-table arranged to hold the individual cooking-utensils, and provided with sinks. A gas burner, or preferably two, and portable oven will be required for each student, and a combination gas and coal range will complete the equipment. In the more elaborate rooms an electric oven will be required for demonstrations by the teacher.

A convenient, well-lighted storeroom with small refrigerator for perishable supplies is a necessity. A great deal will be added to the effectiveness of the instruction by providing a small model dining-room where the girls may be instructed in table-setting and serving. In fact, the most complete equipments demand a housekeeping suite consisting of living-room, bedroom, bathroom, pantry, and kitchen, completely furnished for instruction in household duties.

The laundry will require the space of a class unit and should be equipped with a nest of laundry tubs, a clothes dryer, and stationary ironing-boards, equipped with electric irons.

One or more sewing-rooms are necessary. These may be of class unit

size and should have a fitting-room. Each room should be equipped with sewing-tables and machines. The tables should be arranged to hold the students' caps, aprons, and work, or storage cases should be provided for the purpose. The fitting-rooms should have storage cases for materials and the hanging of unfinished garments, a fitting-platform, skirt and bust forms, and a pier mirror. Both the fitting- and sewing-rooms should have a fixed ironing-board with electric iron.

Manual training.—The woodworking room should be of ample floor space (not less than 40 square feet per pupil), to accommodate classes of from twenty-four to thirty pupils.

The benches should be substantial and rigidly secured to the floor and should be provided with drawers to hold the individual tools. The tools used in common should be conveniently arranged on the bench back or in a common drawer.

If floor space will permit, an instructor's bench surrounded with a raised tier of seats will aid the instructor in his work. A grindstone, glue-heater, and glue-bench will complete the equipment of the shop.

The woodturning room should be somewhat larger than the woodworking room, as additional space will be necessary to receive the lathes. These may be of the belt or individual motor-driven type. The equipment will be complete with a toolroom where the tools used in common by the students are stored; a storage-room arranged with coils for the storage and drying of the lumber; a preparation room containing a motor-driven cross-cut saw and circular saw, where the lumber is cut to shape for class exercises; and a finishing-room where the articles are varnished and finished. This room should have a fireproof receptacle to hold the paint, oil, and varnish.

A molding-room to accommodate twenty-four pupils should be 24 to 30 feet wide and about 40 feet in length. This will provide the necessary space for the molding-troughs, melting-furnaces, and floor space for making up and pouring the flasks. A cupola furnace is not necessary as it is only in the more elaborate schools that iron-molding is attempted. A small furnace for the melting of soft metals is all that is required in the majority of cases.

The forgeroom should be equipped for twenty to twenty-four pupils and will require a floor area of 40 square feet per pupil. It should be equipped with down-draft forges and underground piping. A separate room to contain the fan, blower, and motor will add much to the comfort of the shop. A drill press, punch, and shears, a power hammer, a wet grinder, and a filing-bench for each two students will complete the equipment for this room.

The machine shop should be about 24 by 60 feet. This will afford the necessary floor space for the machines and filing benches. Machine tools to accommodate sixteen students is all that is required, as the number in the fourth year's work will rarely exceed this. The machines should

be of standard make and selected for simplicity rather than complication, while one or two of the more elaborate tools may be installed for the use of the more skilled students and the instructor.

Gymnasia.—If physical training is to be compulsory, two gymnasia will be found a necessity. The minimum size of these rooms would be 25 to 30 by 70 feet, and the minimum story height would be 14 feet. The ideal size would be 50×80 feet with a story height of 18 feet, which must be increased if a running-track is installed. Besides the necessary apparatus, the rooms should be provided with steel storage cases for dumbbells, Indian clubs, and wands. Dressing-rooms equipped with lockers for sections of fifty pupils each, with one or two showers for the girls, and showers and plunge for the boys, will add much to the completeness of the equipment.

Opinions differ widely on the practicability of running-tracks, as they can be installed only in the larger rooms, are seldom used in class work, and are very expensive. Unless the conditions are most favorable for their installation, they had better be omitted.

Library.—A high school is not complete without the library. This is the room in which the pupil will spend his unoccupied periods, and it should be well lighted and equipped with reading-tables and metal book-stacks.

If the school is of large dimensions a separate book- or stackroom will be found a necessity, and the equipment should be such as is found in public libraries.

Restrooms.—There should be restrooms for both teachers and pupils. Large rooms are not necessary, but they should be well located and equipped for the use of pupils and teachers who are indisposed and who need simple medical attention, with an opportunity for rest and relaxation.

Auditorium.—The growing demand for the use of high-school auditoriums for evening lectures and purposes other than strictly school use demands that they be located on the ground or first floor, and near the main entrance of the building. They should be capable of seating the entire school, should be well lighted, with the windows arranged for darkening curtains, and should be provided with sufficient exits to enable their vacation within two minutes. It goes without saying that auditoriums are strictly speaking-halls, and should be proportioned to obtain the best acoustic results.

The stage should be of ample proportions, with sufficient width to accommodate the stage setting for the class plays, large choruses, and other exercises.

Offices.—The administrative office of the building should consist of a general and a private office, a small reception room, and a storage vault for records. The group should be located near the main entrance and conveniently arranged to facilitate the work of the school.

Lockers.—The practice of lining the corridors of a high school with lockers should not be encouraged. Lockers should be placed in large,

well-lighted, and ventilated rooms where they can receive proper supervision and care. If, for economical reasons, they are placed in corridors they should be recessed and ventilated by a system of ducts exhausting the air from the corridors.

Lunchroom.—The lunchroom forms a very necessary part of a large high school. The short lunch period prevents all, except those living in the immediate vicinity of the school, from leaving the building at noon. The room should be ample in size and equipped with long serving-counters and a kitchen with convenient service entrance.

PLAN

Having considered, briefly, the various units which go to make up the high school, let us assemble them, assuming we are planning a building in an active community to accommodate 700 or 800 pupils.

The organization of our school demands study-halls to seat two-thirds of the students. We will place these on the main corridor, first, for ease of circulation; second, for the purpose of opening them *en suite* with the library on the main floor; and third, for convenience to the main stairways; and will fix their maximum width at 28 feet in the interest of perfect light. The library we will increase in depth to 36 feet, in order to accommodate the maximum number of readers, and on account of the extra depth we will give it additional height to insure its perfect lighting.

The auditorium we will enlarge to a capacity of 1,200 and arrange its long axis parallel to the main corridor, in order that we may provide a stage with 60-foot opening capable of accommodating large choruses and symphony orchestra, mass drills, etc., and in order that we may be able to eliminate the side galleries, and obtain perfect sight lines for everyone.

The gymnasium we will enlarge to accommodate all indoor games. We will place it on the auditorium floor level, so that it may be brought into use with the auditorium for the social features of the school, and, if need be, we will give it height sufficient for running-track or a spectators' gallery if desired.

The recitation rooms we will plan to accommodate a maximum of thirty pupils, and will place them along the secondary corridors.

The science rooms we will arrange in stacks at the ends of the secondary corridors with instructors' rooms and lecture-rooms opening *en suite.*

The lockers we will divide between the three floors, and, instead of stringing them along the corridors to obstruct them, we will place them in open alcoves where they can receive proper light and supervision.

The toilets will be placed in stacks, opening off locker alcoves; and the teachers' and pupils' restrooms we will place adjoining.

The art and commercial rooms we will place to the north over the gymnasium, where studio lighting can be provided, and if our gymnasium

has the extra height necessary for the running-track, we will reach them by a half-flight at the secondary stairways.

The manual-training rooms we will place upon the ground floor. Here we will arrange our space in units of the proper dimension to provide for woodworking and metal-working, with convenient storerooms along the secondary corridors; while domestic science and sewing will find suitable rooms under study-halls, with space for housekeeping suite, store- and fitting-rooms.

Our lunchroom we will place under the auditorium and open it from the main corridor, and the swimming-pool of standard size we will place within easy reach of the gymnasium by private stairways, with the showers and locker-rooms under the courts. We will also arrange it so that it may be used during vacation with minimum cost for supervision, and without access to the building proper.

Our main corridor will be made 16 feet wide, the secondary corridors 10 feet wide. At the main entrance we will open up the corridor to provide commodious approach to the auditorium and a dignified introduction to the administration rooms on either side.

Our main stairways we will arrange in double flights and the secondary stairways we will place to serve the secondary corridors.

We will also give some thought to the future, and arrange the wings so that they may be carried back to meet any demand which may be made upon the building by way of extension.

The boiler- and fuel-room and heating apparatus we will place under the gymnasium where we can effectually cut it off from the building.

With our building but two stories in height, our corridors and stairways fireproofed, our five exits widely separated, and care in constructive parts, we are reasonably sure of a safe and comfortable building.

As the design of a building should be the natural outgrowth and should express truthfully the function of the plan, we will now give it attention. We find that the projection and added height of the library furnish a natural motif for a dignified treatment of the main entrance; the fenestration of the large study-room units enables us to give them proper expression on the main façade; the side entrances and smaller class units furnish the natural spacing for a less ambitious treatment of the wing façades; and the high openings in the gymnasium enable us to give its location outward evidence. Thus, without any straining for effect or warping of its parts, we find our building capable of harmonious expression in every way consistent with its uses.

Nor does the process vary greatly when applied to a school of double the capacity of the one just considered. For illustration, we will take a high school, the plans for which are just completed and contracts about to be let. In this case, we have planned a building with a normal capacity of 1,600

pupils in classrooms. We have abandoned the study-hall plan, and in the accommodation of the building we are not taking into account any of the special rooms or shops.

Our classrooms are based upon two units, a room seating 48 pupils and a room seating 36 pupils, in which the students study as well as recite.

We are fortunate in having a site of some ten acres in extent; it is divided by a cross street at its summit into two parts and the grade slopes both ways from this street. We thus have a commanding position for the building, and the slope from building to street in front forms a natural amphitheater for the athletic field, for by leveling the central portion and sloping the sides the tiers of seats can be placed upon the slopes without obstructing the view of our building from the boulevard in front. We thus have opportunity of providing a field of regulation size for all interschool games, school festivals, etc., are able to provide seating for 8,000 persons, and to provide for their comfort by placing public comfort-rooms, coatrooms, etc., under the amphitheaters near the principal entrances. We are also able to provide the dressing-rooms, etc., for a large number of contestants in the games.

Outside of the field, sufficient space is retained for walks and parking, thus providing adequate formal approaches, as well as a fitting setting for the building.

There are three entrances to the first floor of the building, the main entrance being located on the central axis of the athletic field; the other two entrances giving directly to the north and south secondary corridors and stairways. There are seven entrances to the ground floor, two on each of its three sides, and one under the main entrance at the front.

There are four main stairways located at the intersections of the main and secondary corridors, each thus serving a definite group of rooms, providing for the rapid circulation of the pupils from floor to floor, and reducing the horizontal travel distance between the various parts of the building. Each stairway is arranged in double flights, that is, the file of pupils passing down on one side will be independent of the file of pupils passing up on the other, thus doubling our stairway capacity and maintaining perfect order in the movement of the pupils between classes. Two single flights of stairs are arranged from the second to the third floors. Two additional stairways are arranged to serve the gymnasia; and these stairways may also be brought into service as emergency exits from the first floor and the auditorium.

The main corridor on each floor is 18 feet wide, the secondary corridors 10 feet wide, all obtaining direct light from the courts.

The classrooms are distributed on the various floors, are all arranged for unilateral lighting, and conveniently grouped with respect to corridors and stairways. As previously stated, they will accommodate 48 and 36 pupils respectively.

The laboratories are arranged in groups on the second floor, with demonstration rooms between, or amphitheater in the laboratory proper. The botany laboratories are placed on the ground floor to the south and the group opens into a conservatory. All laboratories are arranged with instructors' workrooms and darkrooms.

The commercial rooms are grouped upon the second floor and consist of a bookkeeping room with bank, a typewriting room, and a classroom.

The four art rooms are grouped upon the third floor, two of them being for drawing and two for art crafts work. The drawing-rooms are provided with studio lighting, and the corridor on this floor has been top-lighted and arranged for art gallery use in connection with the art rooms.

Two mechanical-drawing rooms are located on the ground floor convenient to the shops.

The domestic science group consists of two sewing-rooms with fitting- and storerooms; a cooking-room with storeroom; a model dining-room, and a laundry. All rooms are unilaterally lighted and have convenient storerooms.

The administration rooms are grouped on the first floor near the main entrance. They consist of a general office with workroom; a storage vault; a reception room; and a private office for the principal.

The library occupies a central position on the second floor over the main entrance and has book-stacks along its inner walls.

The auditorium occupies the center of the building on the first floor, the balcony being arranged to discharge to the second- and third-floor corridors. Its ten well-distributed exits provide the means for the rapid discharge of the room, and the distribution of the pupils to the various parts of the building. The room will furnish comfortable seatings for 1,800 persons. The stage, unusually large, 50 feet×80 feet, is planned for an overflow gymnasium for the girls as well as for all high-school uses, and by means of a sound-proof curtain both auditorium and gymnasium may be used simultaneously, the stage in front of the curtain being 15 feet×72 feet. The auditorium floor, being on the same level with the gymnasium to its rear, affords opportunity for their joint use for the social features of the school, while the two gymnasium stairways may be brought into service as emergency exits.

A music- and lecture-room is placed on the third floor in the center of the building. It will furnish comfortable seatings for 250 persons in raised seats, and will be used for mass singing, lectures, faculty meetings, etc.

A retiring-room, or emergency room, for pupils is placed upon the first floor, as is also a room for men and a room for women teachers.

Two gymnasia are provided. Each room is 40 feet×80 feet, and they are arranged with a roller partition between, so that they may be thrown together for joint use. They are top-lighted and have spectators' galleries opening on the sides from the second-floor corridor.

The swimming-pool is placed upon the ground floor and is arranged for use by both boys and girls.

The lunchroom is placed upon the ground floor under the auditorium and has convenient service entrance, kitchen, pantry, and long serving-counter, and will accommodate one-half of the school at one time. It is thus possible for the entire school to be accommodated on the two-period plan.

The lockers are placed upon the ground floor, in well-lighted and ventilated rooms, near the entrances and toilets.

The heating apparatus, boilers, fuel-room, etc., are placed under the gymnasia, are well separated from the building, thus preventing the penetration of noise to the auditorium and other departments.

The manual-training shops are in one-story wings to the rear and include a woodworking and woodturning shop with stockroom, finishing-room, lecture-room, and lockers, and washroom for woodwork, and a machine shop, forge shop, molding-shop with tool and locker- and wash-rooms for iron work. The group is completed with a room for the power plant.

In conclusion we find our school buildings, then, becoming more and more, each year, a factor in the affairs of the community, and it is important not only that they should be planned with such care as will render them safe and sanitary, but that they should also be given an exterior treatment which will reflect the refinement and good taste that their importance demands.

It is not necessary to use expensive materials, or to add useless appendages in the hope of obtaining novelty or beauty. The best things are those which evidence a restraint in design which is always consistent with good taste, and a little conscientious study on the part of the architect is all that is necessary to bring about this result.

DISCUSSION

L. N. Hines, superintendent of schools, Crawfordsville, Ind.—At first glance it would seem to be useless to attempt to add anything to the admirable discussion of the subject of "School Architecture" that Mr. Ittner has given us, nor shall such an attempt be made at this time. It is well, however, to emphasize the general thought of the address to the effect that school architecture is today getting more attention than ever before. In fact, perhaps no line of architecture is getting more attention today than the planning and construction of schoolhouses. Originally anything would do for a schoolhouse. Now there is nothing too good for the most forlorn urchin that is under the care of the great public-school system of our commonwealth. The first tendency in present-day school architecture is toward a greater conservation of the health and comfort of the pupil. The second is toward making the schoolhouse attractive and an artistic inspiration to the youth that must come under the influence of what the school architect has done. Not only must the school building serve the immediate needs of the school for classroom instruction but it must serve the public as well. The modern school should be institutional in that it must have the room and the equipment to serve as a center of the general educational and other activities of the community. This view has become so general in

our cities at least that to give expression to it again is merely to contribute a trite expression to this discussion. Such leaders as Mr. Ittner are revolutionizing the science of schoolhouse construction. Tomorrow these leaders will pitch their tents still farther along the road of progress and the dream of today will become the reality of that tomorrow. If there is anyone so benighted as to think that all the elaborations of the modern school building are simply foolishness, let him visit a few of the great modern buildings in some of our cities, study them, and see the service they give to their communities, and he will no longer sit in the seat of the scornful.

One of the curious phenomena connected with the erection of a modern school building in any community that has never had such a structure is the initial attitude of at least a part of the public toward the project, as contrasted with the later attitude of the same community. Objectors arise that say the whole plan is foolishness, that there is no need of having a school building with an assembly room, that shower baths are merest nonsense and that the pupils can bathe at home, that a swimming-pool and a gymnasium are a waste of money and a waste of the pupils' time, etc., *ad infinitum* and *ad nauseam*. All of us have heard such complaints whenever any proposition is made looking to giving any community something finer than it has ever had in the school-building line. Let the building once be finished. Let the objectors walk thru its wide corridors, inspect its well-lighted rooms, and see what a beauty the institution is, and all objections vanish as the dew before the sun. Community pride asserts itself. Parents realize that they want their children to have the best there is. The final attitude of such a community is a mixture of higher ideals in regard to educational needs and a resolute determination that it has the finest schoolhouse in all its own section of country, if not in the nation and the world at large—bar none. The people at heart believe in education. They may object in the beginning to the construction of fine school buildings, but if these buildings are such that they are objects of pride, then all objections fade away.

One of the surest indications that the people are becoming increasingly interested in the matter of the construction of schoolhouses is the fact that legislation is concerning itself with the problems of the planning and construction of these houses. The limits of this paper will not permit the discussing of the laws of the states in detail. Perhaps reference to what has been done in my own state of Indiana recently will suffice to show the trend of legislative action along these lines.

The Indiana statute in question we consider a long step in advance in the matter of proper schoolhouse construction. The planning of buildings is not left to the whim of anybody nor to the parsimoniousness of some school officials. Certain things must be done, and, if they are not done, contractors and others cannot collect money for their work. School trustees are held liable on their bonds for any money paid on a building not constructed according to this law, and, further, any taxpayer can secure an injunction against any such payment, were any official inclined to make it.

The principal provisions of the statute are as follows:

1. All building sites shall be dry and have proper drainage.
2. No building shall be closer than 500 feet to a steam railroad.
3. No building shall be closer than 500 feet to any noise-making industry or unsanitary business or condition.
4. Every two-story schoolhouse shall have a dry, well-lighted basement under the whole house, at least ten feet deep.
5. First floors shall be at least three feet above the ground level.
6. Each pupil shall be provided with at least 225 cubic feet of air space.
7. Interior walls and ceilings shall be painted or tinted some neutral color.
8. Study-rooms shall be lighted from one side only.
9. Glass area shall be not less than one-sixth floor area.
10. Windows shall extend from not less than four feet from the floor to within one foot of the ceiling.
11. Window shades shall be roller or adjustable and of neutral color.
12. All desks shall preferably be adjustable and at least 20 per cent in each room must be adjustable.

13. Light must fall over the left shoulders of the pupils.
14. Blackboards shall preferably be slate and must be black.
15. Where possible, drinking-water must be supplied thru drinking-fountains. Otherwise it shall come from driven wells.
16. Buildings shall be kept at 70 degrees Fahrenheit and at least 40 per cent of humidity.
17. Fresh air at a rate of not less than thirty cubic feet per minute per pupil shall be introduced into each room.
18. Ventilating ducts shall withdraw the air from every schoolroom at least four times every hour.
19. Any school trustee or trustees that shall build a building that does not conform to the provisions of this law shall be subject to a fine of from $100 to $500.
20. Any money claim for material or services on any building that does not conform strictly to this law shall be null and void.

Indiana owes this step in advance largely to Dr. J. N. Hurty, the magnificent secretary of the Indiana State Board of Health. Already school architecture in that state has taken an upward step. The big thing about the statute is that it is in the law books and must be obeyed. Other states are working in the same direction. The nation is coming to see that the health and comfort of the school children must be conserved. The school architect is doing his share in a wonderful way. A better day is dawning.

ROUND TABLE CONFERENCE

TOPIC A: CAN THE ADMINISTRATION DEPARTMENT OF A SCHOOL SYSTEM SERVE AS A LABORATORY FOR THE INDUSTRIAL TRAINING OF CHILDREN?

A

G. E. WULFING, DIRECTOR OF INDUSTRIAL EDUCATION, PUBLIC SCHOOLS, GARY, IND.

Before attempting to answer this question I should like to define my position on vocational training. A vocation is any business, trade, profession, or calling followed as a means of livelihood. Vocational work in the school is simply training for a vocation. My notion is that all school work should have as one aim vocational efficiency. I would not advocate giving all the pupil's time to training for some definite and perhaps narrow calling or trade. I would advocate rather that, whatever the school occupation, it should contribute something to the child's future ability to choose and follow successfully some vocation.

It is not the purpose of this paper to discuss the advisability of vocational work in the public schools. The subject has been widely discussed. Great educators have passed favorably on the subject. The question is not so much one of advisability as one of ways and means; the question of the transition from our purely cultural school for the book-minded few to the practical utility school for the masses, which the compulsory school law has made it our duty to provide. With the great mass of people the question of vocation is the paramount one and they are demanding that the schools help their children in preparing for the problem of bread and butter. Manufacturers and employers generally are demanding from their employees that standard of intelligence which comes from actual contact with real things and conditions. They do not object to the pursuit of the purely cultural subjects so much, but they insist that science and the industrial and commercial subjects count so much more in the training for efficiency. These demands are to a certain extent prompted by selfish motives but they must receive a consideration.

Teachers themselves have begun to realize that school work need not be entirely divorced from any thought of utility to give it cultural value. They have to admit

that a course in stenography and commercial law and practices offers great possibilities in mind growth and mental discipline. They are alive to the fact that the sciences are of great educational value, developing keen observation, methodical thinking, and a deep insight into the world of nature in which one is to live. They tell us that thru the motor activities of the child he receives his most intense mental impressions.

The vocational activities are assuming their rightful place in the public schools.

The criticism is often made that our school work is lifeless; that it is passive, and that our pupils drag thru school, developing a habit of idleness and indisposition. In too many places this is true, but the trouble is not so much with the subject-matter as with the individuality of the teacher, or with the general organization of the school. It is absolutely essential that our schools be organized in a way that will promote freedom, individuality, initiative, and industry. There must be less of restraint and of restrictive discipline. If the school is to prepare for life the child must begin in school the problem of living.

In utilizing the school plant as a laboratory for vocational training it is first essential that we recognize the fact that the school is intended for the pupil and that the program must be arranged accordingly. We must break away from the habit we have of setting a standard to which all pupils must measure, or a definite course which all must follow. We must have a flexible program. There must be more freedom in election. The boy who has absolutely no taste for books must not be compelled to measure up to the same standard with the bookworm. It would be just as reasonable for the boy of great physical activity and industrial bent to set the standard for the boy of books. Less attention should be given to classifying pupils, or at least a different basis of classifying should be used and more time given to the classifying of subject-matter and of teachers. The program should be so arranged that a pupil could give extra time to a subject in which he wishes to specialize. The program should allow the pupil to discontinue any subject in which he is making no progress and in lieu of it spend his time where it would be of more profit and interest to him.

If the school plant is to be a laboratory for school work we should see to it that no one is employed on the school premises who is not clean enough in personal habits and possessed of enough intelligence to be a teacher in his or her line of work. I would use these people as teachers. There is not a line of work around the school plant that cannot be made the basis of most valuable occupation. We will consider the different lines of work separately.

First, in the purchase, care, and distribution of supplies for the school we have a most valuable laboratory for arithmetic, English, and clerical practices, the use of which should not be neglected. The person in charge should be a teacher. Purchasing supplies, the consulting of catalogs, the comparing of prices, judging the quality of goods, taking bids from dealers, estimating costs, etc., give occupation the value of which cannot be questioned. The correspondence involved and the billing-out of supplies to be distributed would give excellent practice in writing and English. The actual practice in the storeroom of handling materials, keeping them in order and properly priced and tabulated would give valuable experience to anyone wishing to take up mercantile clerical work. The opportunity of pupil responsibility, so woefully lacking in our public schools, is here given a chance to be exercised. The item of dealing with real things and feeling the responsibility of doing things right would add the very desirable element of seriousness to a child's work. A great deal of this work could be done by the grade pupils while the more difficult bookkeeping should be done by the pupils of the commercial department. The item of expense for this line of work would be practically nothing as the supplies are cared for at an expense under any arrangement.

The school has no right to offer to the public a product from its commercial department which it could not use in its own plant. In the administration of the school we have a most excellent laboratory for clerical and commercial work. The school corre-

spondence as a basis for practice in stenography; the bookkeeping, the filing of correspondence and documents, and the making of office reports should be up to the commercial department. The ordinary office force should be at least assistant teachers. Here again there is no added expense. And should it be expensive, the efficiency of the training would justify the cost. It is the logical laboratory for penmanship, English, and commercial practices.

In the teaching of the sciences a laboratory is considered indispensable. School boards spend large sums of money to secure well-equipped laboratories, and the progressiveness of a school is often judged by the character of the apparatus in use. The outfit is used to demonstrate a well-defined and theoretical course of study. Too often the child is never allowed to leave this prescribed course of set experiments with the conventional apparatus to inquire into materials and conditions near at hand. I would suggest that often the school plant can be made to do service of great value to the pupil. As an illustration, I will mention the testing of coal and building materials; the examination of milk and other food-stuffs used in the domestic-science department and in the school café. The school lawn and the landscape gardening which every school should have should be a laboratory for nature-study. The sanitation of the school is one with which the pupils should be more intimately acquainted. As a rule it receives no attention whatever on the part of the pupil. In this connection I would like to suggest that the care of the building offers a line of laboratory work which could be used to most excellent advantage. The standard of janitor work should be far above what we generally find in the average school. The man at the head should be an expert in sanitation. He should be a high-priced man. His personal habits should be above reproach, and he should be a patient and conscientious teacher. Pupils should work with him and he should teach them the modern heating systems and heat regulation. He should teach them the elements of sanitation and ventilation. Pupils should be given a room to keep clean and in a sanitary condition, and when an established standard had been attained, should be paid for work accomplished. A schedule of pay could easily be established, and definite work allotted to each pupil, with hours and conditions under which it is to be done. In many cases the pupils of a room under the leadership of the teacher will care for the room with most excellent results.

It is perhaps in the industrial work of the school that we have the greatest opportunity of using the school plant as a laboratory. A man employed as cabinet-maker will have a large variety of work to do which will give the best possible apprenticeship employment. Bookcases, cabinets, tables, desks, benches, etc., with other work that presents itself give the pupil quite an extended experience, and make the course thoroly practical. I would not advocate that all cabinet work for the school be given over to this special class, but would have the regular manual classes work out anything that would be within the ability of the average pupil, and where it could be made a class problem.

All cabinet work requires additional work in the way of staining and finishing. This involves the employment of a painter and wood-finisher. In addition to the finish of the cabinet work there will be buildings to paint, both inside and out. There is always varnishing to do, the interior finish of buildings and the desks and furniture to be refinished, and odd jobs innumerable in which a large number of our boys are always ready to help. This gives a most excellent opportunity for trade training.

The engineer of the heating plant should be a man of patience with boys and with him at all times could be a number of boys studying practical firing, engineering, and ventilation. It is to be regretted that none of our pupils and so few of our teachers know anything of modern and practical methods of ventilation in use in their own schoolroom. I am inclined to think that it would be wise to have a pupil from each room to act as assistant to the engineer and ventilation man. In this connection it might be well for us to consider the fact that in every class of boys there are those whom we should most benefit if we should teach them to do well such work as firing; work which is

not so exacting in skill as in conscientious effort and faithfulness. We have done a great deal for the industrial cause as well as for the boy when we train him to realize that whatever the nature of his work, he is filling his position with honor if he is doing his work well and conscientiously.

In our more modern schools there is need of an electrician to care for the many motors, lights, bells, clocks, etc., in use. There is no reason why a man working in this capacity should not have a number of boys working with him and in addition have regularly organized classes in armature winding, motor construction, etc. The equipment for this line of work is practically nothing added to the regular school equipment and is practical and fascinating for a large class of boys.

A carpenter is generally employed by most schools for the greater part of the year. He should be employed full time. Pupils wishing to learn the carpenter's trade should be allowed to work with him. Where circumstances demand it, the work of a carpenter and cabinet-maker can be combined in one man.

Printing, the art preservative, is a line of work especially attractive to school people and offers a most excellent line of work for both boys and girls. A great many schools consider a printing plant an important part of their school equipment, and when once it is established they could not easily do without it. In almost any school there is sufficient work to keep a printer employed the year around. In all schools there is a large amount of printing needed which cannot be had on account of the cost. A printing plant should be maintained with the best possible man to be had as instructor. Interested boys and girls should be allowed to serve an apprenticeship with him. It is interesting to note that when we make our school a real, live community in which the children really begin the problem of living and dealing with real things and conditions, one line of work suggests another related occupation that can easily be carried out. A printing plant soon creates a demand for a bookbinding outfit and a bookbinder is a man who could be kept busy to good advantage in almost any school. Notebooks to be made, the printer's work to be bound, schoolbooks to be repaired and rebound give valuable experience in bookbinding. It does not seem to me to be an overambitious thought for a school to print and bind many of its own textbooks.

A printing plant also creates a demand for cuts, such as halftones and zinc etchings. This opens up the way for photography and photo-engraving. Both are very valuable lines of work and could be easily cared for in a live school.

In the case of foundry work and machine practice the situation is not the same as with the printing, cabinet work, etc. But there is no reason why a large amount of real, practical work for the school plant cannot be done. In the schools of large cities and growing towns there is always need for new equipment requiring the product of the foundry and machine shop as well as the forge. In such cases it would be well to have your man employed for this work, separate from the regulation manual-training classes, and let boys desiring to take up the work as a means of learning a trade work with him.

There is such a demand for instruction in farming even among our city pupils that it would be well to offer instruction in this line wherever possible. Where it is necessary to employ a man to care for the school grounds, it would be well to employ a competent man and with a very little extra expense valuable laboratory work could be offered in elementary agriculture and horticulture. The nature work which we are struggling to make effective would count for so much more.

To complete the vocational laboratory of the school there should be employed a draftsman, whose business it would be to furnish the plans and specifications for the different lines of industrial work. This would offer for a certain class of boys the most practical line of drafting they could be given. The position could be well maintained in most schools as the service of a draftsman is a considerable item of yearly expense.

I advocate these lines of work because of their intense and practical value; because they are real and incur pupil responsibility. I would not confine the work entirely to

school work, but would have a reasonable amount of theoretical instruction and preliminary work. As an illustration, I would have the carpenter and his help construct a section of a house, or what would be better, a complete one. With it the demonstrations of the painter, plumber, electrician, tinner, etc., could be carried out. With the school where economy is a prime virtue this plan is especially attractive. Nearly all lines of work can be had at practically no expense. I am not talking all theory in this paper. Several lines of the work have been tried out to our entire satisfaction in the Gary schools. We are so well pleased that we will offer practically every line of work mentioned in this paper. Our printing and cabinet departments have been better than self-supporting. Our painting department could have been so but over half of the painters' time was given to regular class work in lettering and sign-painting, work which produced no value for the school plant, but was very valuable and with which we are perfectly satisfied. In the printing department thirty-five boys and girls received valuable training in the trade. Several boys profited greatly thru our cabinet shop. The training was such that we are pleased to employ two of them during their summer vacation at good pay. One boy who had training on our school farm is taking care of the school horse and delivery work for the summer and is making good. Quite a number of boys have had a valuable year's experience with our painter, and are ahead in their apprenticeship if they decide to follow the work as a trade. And what is just as important, a number have found that it is not the calling in which they would be apt to make a success. A large class of boys and girls have been receiving very valuable training in our commercial department and a number have been well located. Others, by having been kept in school a little longer, have become ambitious for a higher education and will continue their school work.

It was my intention to present some statistics showing the amount of money spent for different lines of industrial work, that might be used for industrial training of our boys and girls, but my paper already exceeds the regulation. As a closing statement let me urge that we should seize every opportunity to make our school work the practical training for vocational efficiency which the masses are demanding.

B

RAYMOND RIORDAN, PRINCIPAL, INTERLAKEN SCHOOL, ROLLING PRAIRIE, IND.

The industrial training of children should have but one big thought in the foreground —character development. That skilled labor might result from industrial training, that industrial training might lead to later vocational training, is to be conceded. Goodness is not character, virtue is not character—only usefulness is character. And men are rare who can be useful to a community and do not know how to use their hands. Industrial education has been the cure meted out for the deformed, the undesirable, the deficient. Industrial education should be the preventive. The cure is doubtful; the preventive is sure.

The son of the workingman has to work and soon becomes a drudge; the son of the man of means gets no chance to work and thus becomes a parasite. Both are, undoubtedly, the result of our public-school system. The United States is criminally negligent in caring for her wards—the children—when it comes to education. And thru education, but beginning with the babe, is the only chance for the regeneration of a race already showing moral decadence.

We are not taught responsibility. Parents do not understand responsibility. They try very hard—many of them—to do all possible for the child, after the child is born. The time to do for the child is during the youth of the parents. And there is no way the youth of the land can be made to understand this, save thru the public schools, save thru industry—unselfish occupation during the adolescent period. Sex-preachments

never prevented anything. Self-protection is not possible thru being told how; self-protection comes from knowing how. The only way to learn is thru doing. Mastery of self, muscular control, mental morality thru centering of thought on helpfulness to others, these attributes are possible only thru constant and unselfish occupation during the formative years. This country does not possess a conscious citizenship. Create standards of usefulness and responsibility thru our schools and political jackpots and political jackasses will the sooner cease to exploit the country.

Any nation truly great has become so thru industry. To the fact that the great mass of German people toil with their hands is due, without doubt, their pre-eminent position among civilized nations today. From the soil emanates life, and recognition of life is recognition of justice. Justice decrees that each shall labor in order that his neighbor's neck may not ever be under the yoke.

This age has kept us so very busy perfecting and marketing horse-power, that man-power has been greatly neglected. In consequence, the man who might be willing to work doesn't know how; and the man who happens to know how rates his earning power with the developed mechanical force, and, his demands being met, has met a resultant decrease in accomplishment at an increased cost. The increase of foreigners, who do the so-called drudgery, has taken from the hands of the male population of this country the source of their forefathers' strength—the strength on which was founded the nation. Great nations have been and are the physically industrious ones. Nations whose light has been kindled by their wits soon find the flames flickering, if they do not go out altogether. The Romans, 'tis true, and the Spartans were most physically fit, but belligerency gets but so far, then like a whipped dog must slink backward and bow its head to justice. The nation that lives by its wits—the nation that climbs thru its armies' activities—is doomed.

"Of law, there can be no less acknowledged than that her voice is the harmony of the world." Law should mean peace. But war, rapine, murder, inhumanity—all have become legalized thru brains. Poor Justice would well be blind that she might not see the shame of law. Moral law needs no policemen, no jail, no courts—moral law bespeaks manhood, helpfulness, Christianity. And the makers of the code of moral laws must be the children.

Education is a matter for constant change—education is progress. Education must meet conditions that are at hand, yet act as a preventive for the recurrence of such conditions. Education should mean happiness and there can be no happiness without successful performance of a task. Law is a result largely of custom, of precedent, and must be. Therefore, new custom, new precedent must begin with the child.

The education of children should have as another big aim civic improvement. Good citizenship should not consist in merely obeying the law. The civil law is but an ill-advised way for creating and sustaining government. No good government can exist unless sustained by moral law and it should be the function of education to insure moral training to the young of the state. There is not a government in existence today where the people rule, and a nation cannot be truly great unless the people do rule. Were the people to rule today, however, not in this country alone but elsewhere, there would be anarchy because education has not prepared the children for civic improvement, for civic understanding. Education should mean self-reliance, fortitude, daring, self-control, endurance, self-sacrifice. Education is too much a matter of quantity—a peck of mathematics, a pound of history, a ton of English, a gallon of geography. Education should not begin at seven and end at eighteen, or twenty, or thirty—education is for always. And that the two aims given—character development and a conscious citizenship—are made possible is the duty of the administration department thru industrial training.

The principal with understanding, having no intermediary but the superintendent, freed from special supervisors—the ruination of independence in teaching and honesty of thought and expression—allowed absolute sway in his building and in the community

neighboring his building, given authority to select his own teachers and plan the curriculum for the individuals coming under his care—such a one could make a public school do what it should for the children of the people.

New ideas in education get a foothold thru the influence of the person fostering such ideas much more often than thru the logic of the thought itself. We are soon almost sure to be flooded with the Montessori method: a method, doubtless, having much of intrinsic merit, but it shows but little that would insure that the next generation be a stolid, honest, industrious, and unselfish one. Indeed, precocity would run rampant and solidarity would be rare. The training of the brain at the wrong period in child life has accentuated shrewdness and removed appreciation of the value of work.

There are few such principals, if any; there has been no precedent governing the training of teachers along these lines. Therefore, to reach the desired aim the beginning for such work must be made thru a system stamped with federal and state approval, if not coming directly under their jurisdiction. The success of such teaching would be assured when the public schools were made self-supporting or partly so.

I personally am positive that any school in any locality could, thru self-maintenance, create a new citizenship. I personally am positive that private schools maintained by the government—federal or state—could become self-supporting institutions and not only develop a conscious citizenship, a clean coming generation, an economic race, but would also train boys and girls to specifically develop the resources of their states, and each state is strengthened thru local flavor. At the present time, we seem to seek new lands to conquer when all is yet to be done at home.

With the above thought in view, and having already submitted to Congress, knowing, of course, no action will ever be taken, a plan for a national school embodying the ideas necessary for the formulating of a new plan of public instruction, it seems in order to read this plan for your consideration. In addition it is suggested that another fund supposedly available—the George Washington bequest for a national school—might be kept in mind as well as the Lincoln memorial appropriation on which the proposed school is based. And even if the Lincoln fund could not be used, surely some action ought to be taken to prevent the George Washington bequest from being brought to light for the further exploitation of experimental work. There are quite enough institutions for research that people might be cured—generally, it is supposed you must first be sick in order to need curing and if your sickness is not the ordinary, so your pocketbook must be if research discoveries are to serve your case—and animals disappear the faster. And so with research institutions operating along academic lines. Higher education has proven itself inadequate in supplying the nation with a race of men. Its product is largely useless and is looked on askance by the business man today. And like this product so will be its progeny. It is now time that the child receive attention, in order that the coming race practice the virtues of industry, economy, helpfulness, and elimination of self.

TOPIC B: WHAT SCHOOL FACILITIES SHOULD BE PROVIDED FOR INSTRUCTION BY MEANS OF MOTION-PICTURE MACHINES, STEREOPTICON LANTERNS, PHONOGRAPHS, PLAYER-PIANOS, ETC.?

A

W. H. IVES, EDUCATIONAL DEPARTMENT, THOMAS A. EDISON, INC., ORANGE, N.J.

The school work of every generation has developed apparatus or equipment of some sort considered more or less essential to the successful carrying-on of the work. In the earlier days this apparatus was exceedingly simple or even crude in form. Nevertheless it was important. Modern methods have produced a wealth of school equipment of a more complicated and also of a more essential character. During the last few years some

unusually important steps have been taken toward the development of apparatus destined to play a very important part in education, and it is our purpose at this time to consider in a general way the possibilities and advantages of some of these new additions to school equipment.

The phonograph has already won recognition as a valuable addition to the equipment of the schoolroom. The diversified ways in which it can be utilized to advantage are only beginning to be appreciated, hence the future of the phonograph as a necessary piece of school equipment seems assured. It is quite natural that at present we should identify the phonograph with the work in music, and its aid in this department is certainly of a character to entitle it to the widest use and popularity on this basis alone. As I understand that this phase of phonograph work will receive the attention of another speaker, it requires no further mention here. We must not forget, however, in our admiration and appreciation of the phonograph as an aid in all that is connected with school music, that it is also a speech-reproducing instrument; that it is still the "talking machine."

The phonograph is capable of saving a vast amount of tiresome work and vocal effort on the part of the teacher. A well-adjusted machine can give out dictation exercises in arithmetic, spelling, and other subjects in a clear, distinct way, more advantageously than the teacher can do the same work. Models of the best examples in reading and elocution can also be presented and in many other ways the phonograph can be used as a practical adjunct to school work. Outside and beyond the field of school music and the realm of cultured entertainment we are beginning to realize the practical pedagogical value of the phonograph as a piece of school apparatus, and it is believed that these possibilities will be developed rapidly during the next few years and that the phonograph will find a permanent and most useful place among the pieces of apparatus or equipment considered absolutely necessary in every schoolroom.

The motion picture has already entered the educational field to remain and to develop into one of the most important aids that superintendents and teachers have ever enlisted in their work. It is of course unnecessary to enter upon a discussion of the pedagogical value of the motion picture, if we can assume practical apparatus, proper films, and all the other accessories necessary to the safe and skillful projecting of motion pictures upon the screen. Americans are frequently referred to as "eye-minded people" and to a large extent this is true. Certainly no one will deny that visualization is an important factor in most educative processes. The presence of a blackboard in every schoolroom suggests the general acceptance which this idea has won in the past and also suggests the great possibilities which the future holds along the lines of visualization work, carried on under sound educational principles and arranged to supplement and aid almost every department of school activity.

While the motion picture is not in any sense a novelty at the present time, its use has been largely monopolized by the motion-picture theater, for reasons which are quite obvious. The use of the standard projector, throwing large pictures upon the screen, necessitates an equipment which is somewhat expensive and complicated. I refer to current installation, the fireproof booth, the licensed operator, the delicate film, and the handling of a piece of machinery needing the nicest adjustment of all its parts in order to do safe and successful work. Until recently no film supply of a strictly educational character has been available. However, the standard projector has frequently been used to excellent advantage in assembly rooms, playgrounds, and other places where large numbers of children are brought together, and has served as an important means of instruction in many instances.

Now for the first time a small projector is available, and this small machine eliminates many of the difficulties and objections which have in the past been connected with the use of the standard machine. This small machine, doubtless the forerunner of many such, can be operated from an electric light socket and requires no special installation of current. It can be operated by either direct or alternating current, and is practical wherever

electric current is available. It can also be operated by acetylene where no electric current is obtainable. The great difficulty connected with the manufacture of a small projector is, however, related to film more than to any other feature. This little machine does not use the standard film. The film employed will burn about one-half as fast as the same quantity of paper and since the pictures on the film are microscopic in size, eighty feet of this small film contain as many pictures as one thousand feet of the film ordinarily used. This small film has three rows of pictures. The two outside rows run in the same direction, and the inner one runs in the opposite direction. There are over two hundred pictures per foot of film, each picture being less than three-sixteenths of an inch high and one-fourth of an inch wide. When we consider that a six-foot picture can be thrown upon the screen from this small film we realize how highly the little photographs are magnified in projection. The successful printing of these tiny pictures on a motion-picture film is a notable accomplishment, since in projection they must be enlarged to 350 diameters or about 120,000 times the area of the picture on the films. This small kinetoscope is also a stereopticon and slides of special size can be projected with entire success, making a picture which is clear cut and well illuminated. The operation of the little kinetoscope is so simple that anyone can undertake it. As far as the machine is concerned, a licensed operator is not necessary.

This machine seems to be an ideal one for use in a schoolroom of the average size and there is no reason why superintendents and teachers wishing to make use of motion pictures in connection with their courses should not do so. Naturally the production of a sufficient quantity of film to cover many courses will require considerable time. The production of a series of motion-picture films does not differ in any important way from the production of a textbook. The processes are similar in many ways, and cannot be unduly hastened, but many films are already available and many others will be produced as rapidly as possible.

It only remains to suggest some of the most important applications of motion-picture work to school work.

One of the first to occur to any practical teacher is the subject of geography. Here the motion picture is able to render the greatest assistance. It can show not only the physical characteristics of the various parts of the world but also the activities of the people, and undoubtedly its use opens a field in this subject so broad and comprehensive that we cannot as yet see its limits. The lantern slide has done valiant service in this department for many years, but the motion picture represents a great step in advance since it adds life and activity to the scenes which it pictures. The pupil can, for example, actually see Niagara Falls just as the observer who stands on the bank sees them, and since the ordinary camera is more accurate than the most skillful painter, so the motion-picture film is more accurate than the most artistic photograph which leaves motion or action to the imagination. The child who can actually see the water rushing over Niagara Falls can also see the gondolas moving thru the canals of Venice, the street cars and busses in London and New York, or the pageantry and pomp of the Durbar. The child in the Northwest can see the great steamships leaving their piers in New York and other seaports, can witness the activity surrounding the great railroad terminals in the East; whereas the child in New York, who is familiar with these scenes, can in turn view the waving wheat fields and the giant harvesters and threshing machines which are so common a sight to the children of rural Minnesota and Nebraska.

The motion picture is able to do much in history in the direction of adding interest and reality to the study of great historical events. Many important incidents in history can be faithfully reproduced before the camera, and while there are limits to which this kind of work can be carried, the field is sufficiently broad to attract attention and to deserve careful consideration.

There is practically no limit to what can be done in nature-study. Everything which can be seen under the microscope can be thrown upon the screen, and the child is

thus enabled to see as much as the eminent biologist, botanist, or chemist, even if he cannot understand the full meaning of all that he sees.

A series of industrial films is already in preparation showing the processes in more than two hundred of the great industries which affect and influence mankind. Here there is also a great opportunity to broaden and enrich the child's fund of knowledge, for no child could hope to visit personally more than a few great industrial institutions, and the doors of many great factories are closed to visitors. The camera-man, however, is a persistent person and goes everywhere.

Civics offers another field for the motion picture which has very wide boundaries. The operations of fire departments, police departments, street-cleaning departments, and other divisions of municipal organization are easily shown on the film. Many of the activities of the national government such as the post-office department, the mint, etc., can be easily represented.

Physiology and hygiene offer inviting possibilities. The motion picture is already used largely in medical colleges, and in the field of school hygiene it would seem as if fifty or one hundred films might accomplish what no amount of mere textbook work could ever hope to do.

In the primary classes particularly we must not forget the entertainment feature. Composition stories and interesting events of all sorts can be thrown on the screen, thus giving a substantial basis for the work in English and enlarging the experience of the child so that he will actually have something to write about when he attempts to write.

It will be impossible to enter in detail upon the discussion of high-school work, but here it may be said that many of the masterpieces of literature which are studied in the ordinary high-school courses have been dramatized and are acted by eminent artists for the motion-picture camera. Physiography, botany, zoölogy, physiology, chemistry, history, and literature are some of the subjects in which this work will find its most useful application. When the time shall come when educators give more attention to the possibilities of the motion picture, uses which are undreamed of at the present time will doubtless be discovered, and many subjects where the utility of the motion picture is already conceded will be worked out in so admirable a way as to challenge the respect of the educational world.

The entire idea is at present in its infancy, but as a means of adding interest to nearly all the subjects in the curriculum and of vitalizing instruction and abolishing formalism, the motion picture is clearly a factor to be reckoned with; and the bringing of this possibility to the schoolroom means a great deal more for future methods of education than most of us realize. It is a trite saying that "seeing is believing," and since we instinctively trust the evidence which the eye presents to the mind, we must utilize this confidence in an educational way to the greatest possible extent.

While great advances have been made in the perfecting of motion-picture machinery and in all the processes connected with projection, it is fair to assume that all these processes and all this machinery will be greatly improved as time goes on, and that the educational world will be the gainer by every improvement which is made. We live in a time when direct methods and the elimination of waste effort in every department of human activity are studied and developed until we have practically a new body of science built up around this principle. The motion picture probably offers the greatest opportunity which educators have ever had to eliminate waste effort and to reach by easier and more agreeable paths the same results which are now attained with difficulty. Past years have witnessed the crowding of the school curriculum by the introduction of new subjects. Many outsiders are still knocking at the door for admission. The shortening of the present courses by the use of modern apparatus seems to offer one solution of this problem, since the time which can be saved in many of the studies as they are now carried on can be devoted to additional work in some of the subjects now included in the course of study or can be awarded to some one of the new claimants entitled to a place in the modern and practical school.

B

FRANCES E. CLARK, PUBLIC SCHOOL EDUCATIONAL DEPARTMENT, VICTOR TALKING MACHINE CO., CAMDEN, N.J.

It may seem strange to some to come to a serious discussion of the talking machine as a regular part of the equipment of the modern school. To a thoughtful observer the reason is not far to seek. Our schools are the most precious possession of the commonwealth, and the education of the young for citizenship the most important function of the state.

As the years have come and gone since our schools were first founded, many changes have taken place in our school plans—methods of procedure and viewpoints. In the beginning the classics were supreme—following the universities of England. The courses were later enriched by many additions and modifications.

In the past ten or twelve years there have come more radical changes in the school plan than have taken place in the entire two hundred preceding years. Almost all at once there came a realization that the schools were not fitting the pupils to go out into the work-a-day world and earn a living under the changed conditions of life, resulting from the inventing and manufacturing of labor-saving devices, requiring a new order of labor, more skilled and intelligent.

Germany's industrial policy, with the inevitable supremacy in trade, was an added impetus—and so there came about almost a revolution of our whole school idea and the introduction of training for a vocation, of manual training, industrial education, domestic science, trade schools, commercial art schools, cooking schools, manual arts, etc., and a complete remodeling of the fundamental idea, to conform to the new conditions of labor and the growth of a more socialistic view of life and its needs.

For the same reason, there followed soon after, an increased interest in the unfortunate children who, from various causes, have been launched on the world handicapped in the race by some physical or mental defect, in many cases to become later public charges. This occasioned an upcropping of special schools, to give to each of these abnormal, subnormal, or defective little ones the best possible education that that particular child could assimilate, and, if possible, to teach him to do some useful and self-supporting work; and so we have founded public schools for the deaf and dumb, the blind, the crippled, the defective, the unevenly developed child, the criminal, the anæmic, and the tubercular.

The lunch kitchens have been opened to feed and nourish the starved child, to enable him to study better, and playgrounds everywhere for the children stunted in growth and development by lack of proper facilities and places to play; "little mothers" classes to teach the girls to help their mothers to care for the babies at home, to check the awful ravages of infant mortality.

All these innovations are steps in the right direction, and make for a better and broader citizenship, a saner and more highly organized civilization.

The whole manual-training idea is of incalculable value to the nation. It dignifies labor, lifts the embryo laborer from the ranks of serfdom into the realm of the skilled, self-reliant, self-respecting artisan.

The danger of this revolution in our schools, like most revolutions, lies in the almost fanatic and excessive zeal of the leaders, in the aggrandizement of one idea to the exclusion of all others.

The new order of things has come upon us with such suddenness that it has been found difficult to adjust things without giving undue attention to the new, to the exclusion of the old.

In many places, and in general, this has happened. The so-called "bread-and-butter" education has been allowed to usurp too much of the time and attention of the pupils, to the neglect of those studies that go to develop a full-rounded preparation for life itself.

Necessary as is the ability to earn a dollar, the awakened understanding, the keen intellect, the vivid imagination, the quickened emotions that enable the wage-earner to plan his work skillfully, to enjoy it, to see the beauties in nature all about him as he works, to lighten his toil by elevating thoughts of the beauties of books, pictures, music—to have a mind trained to keen enjoyment of life at its best, to have a heart to serve and love well the friends that God has given, to appreciate good in all, to love the good and follow after it—these are still greater. We dare not omit such training from our daily plan.

Education should give to every child, no matter what his station, those things that fit him to take his place in the community, that help him to live a fuller and more beautiful life. The cultural studies in literature, art, and music contribute to this end in arousing the imagination, the emotions, the love of the beautiful.

The talking machine has entered the educational field with the purpose of furnishing a way to bring to the hearing of the children and youth a great wealth of educational matter not otherwise available.

It is a well-known fact that the sense of hearing is the first power of the mind to be developed. A child hears almost from birth and in early infancy and in early childhood the ear is the ever-open gate to the brain. "Little pitchers have big ears" has in it more of truth than proverb. Long before the eye-power has developed sufficiently to permit of the child gathering knowledge of words from printed characters, he has acquired a working vocabulary of at least five hundred words, and in some cases many more. While the organs of speech have gained strength and skill enough to reproduce five hundred or more words, he has heard, more or less consciously, hundreds more. Teachers of reading have long since profited by this condition and have learned to build upon the foundation of spoken language learned at home, and to further pursue this plan of presenting all new words, signs, and combinations first thru the ear. So acute is the ear and so ready the response to the sound-waves, that parents desiring to have their children acquire two or more languages at once simply employ a nurse or governess speaking those languages.

The study of music has been very much retarded in this country and never used for anything like its full value educationally, because of the impossibility of having the children *hear* really good music. The music known and studied has necessarily been bounded by the horizon of the pupil's own ability to produce.

With the restricted possibilities of weak vocal chords, the limitations of the child mind to grasp the grammar of the language, the field of endeavor has been pitifully small.

When we speak of our child studying music, we have meant that our child's eyes have sufficiently developed to begin reading notes from a printed staff, and that his muscles have come sufficiently under control to be able to pick out five-finger exercises on the piano. Now this is all wrong and at variance with our methods of teaching languages. A child should *hear* music, good music, the best music, almost from birth—hear it over and over again and again, but always the beautiful, the right sort of music, all the years of his childhood. Then, when he comes to the place in the school course where he must begin to study printed symbols, he brings to it his accumulated knowledge of years of previous hearing of the music itself.

The talking machine touches this vital spot in educational work. It makes possible to do what has never before been attainable, viz., the hearing of the real music before the study of its form and content and during all the years of school work in music it illustrates in concrete form every fact and theory given in the lessons.

There is no other one study in our whole school course of study that so reaches and stirs the emotional and æsthetic nature of the child as does music—no other that so arouses the imaginative faculties. A writer has said that music is the fourth great elemental need of man; first, food; second, clothing; third, shelter; fourth, music. It is quite certain that there is no other one thing so universally used, so universally loved—it is truly the one common language of all nations, races, and civilizations.

It is just as important and just as interesting to learn the history of music, as it has grown up since the beginning of the race, as to know any other phase of history. It is just as much a part of a well-rounded education to know the literature of music as to know any other literature, as of art, or of various languages, countries, and peoples. As a matter of common intelligence, one should know the great music of the world, its masters and creators, its schools and periods of growth, its national characteristics, as well as the great poetry, prose, and drama of the world.

We are often stigmatized as being an unmusical people, as having no taste in music, not knowing or appreciating the difference between good and bad music. This has, alas, been partially true in years past, owing to the exigencies of empire-building and remoteness from the older and established nations. Our forefathers gave themselves almost wholly to developing a new country, a great new world, cutting down trees, breaking prairies, building railroads, canals, and cities, giving scant attention to the finer elements of human need.

Most of the people of later generations have grown up without coming in contact with the real music of the world, without any real knowledge of it. What more natural than that out of these conditions, out of these new towns and cities growing up in the wild and waste places, remote from the older settlements, with the innate love of music strong and elemental, there should have sprung up a sort of wild, rugged type of music, gypsy-like, free, expressing the rush and bustle and swing of a new national life?

Now, the children should be led to an appreciation of the real and vital music, in an effort to raise the standards of taste among our people, to help the next generation to overcome the crudities and depravities of the last. To do this in any national sense, some means must reach into every corner of our country, every city, village, and country school, take to every boy and girl, high or low, rich or poor, the real music of the world, so that all may grow up from childhood with the refining and discriminating influence and knowledge of good music.

The talking machine is the only medium that can perform this service. It is simple, inexpensive, practical, portable, easily operated, and may go into every sort of place where children work and play and study, furnishing the practical help of accompanying the games, calisthenics, marching, folk dancing, social and recreation center dancing, etc. Talking machines were practically used in only a few schools two years ago. Today, they are in daily use in more than four hundred cities, in many of them in every school.

There are now made special records for marching, for calisthenics, for folk dancing, for the rote singing for primary grades, for intermediate grades, grammar- and high-school work, records for correlation with the studies in literature, the Burns and Shakespearian songs, the songs of all the different nations; there are songs of the older composers to correlate with studies in general history in those epochs. We are issuing a course for high schools, complete and thoro, in music history and appreciation.

The talking machine came into existence to amuse—it remains to educate. What was once a luxury has become a necessity—a curious toy has come to be a practical and indispensable instrument in modern education.

Every school should have its talking machine just as it has maps, globes, supplementary readers, etc. It is comparatively new, but necessary, just as are sanitary drinking-fountains, sanitary towels, and the equipments for manual training and domestic science.

The field of the talking machine is not limited to the teaching of music alone nor yet to the obvious service of furnishing accompaniment to the physical culture and folk or interpretative dancing. The whole realm of vocal expression is wide open and is being rapidly filled by records of readings for every grade, stories for the kindergarten and home circle, models in diction, inflection, and all the shades of expression of the cultured human voice.

It is not too much to dream of a time in the near future when the talking machine and the moving-picture machine may unite to give a realistic production of opera or of the

drama. Selections from the plays of Shakespeare now give valuable suggestions to high-school students for amateur production and we have only just begun. The possibilities are boundless, and no modern school can afford to be without its talking machine, any more than its library, its workshop, its kitchen, or its laboratory. The talking machine has come into the educational world to fill a real need and will, therefore, stay as an indispensable adjunct to the equipment of every school.

C. *USES OF THE VICTOR AND PLAYER-PIANOS IN SCHOOLS AND SOCIAL CENTERS*

AGNES BENSON, SUPERVISOR OF MUSIC, PUBLIC SCHOOLS, CHICAGO, ILL.

1. For marching the children in and out of the school buildings at recess and dismissals.

2. As an accompaniment of folk dances and gymnastics in corridors and gymnasiums. —Departmental teacher, with children as assistants.

3. For rest and recreation.—In the intermediate grade the hearing of "The Anvil Chorus," the dancing of the "Shoemaker," the "Danish Ring Song," or imitating the song "The Little Drop of Dew."

4. The teaching of a song in the classroom.—(1) For primary grades in Mother Goose melodies. (2) For grammar grades in connection with the use of the "Laurel" for better interpretation: the hearing of Witherspoon in "The Lost Chord," Evan Williams in "All thru the Night," or the Victor Opera Company in "The Anvil Chorus."

5. In the development of musical taste and appreciation.—Methods: In a special room as at the Sumner; from room to room, where it is used by the individual class teacher; in the hall, either in optional programs before school as at the Tilton; or in obligatory classes during school sessions. (*a*) We use the Victor. (*b*) Careful selection of records, which should be left to the music department.

Summary: The talking machine is a live factor in modern education.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

OFFICERS

President—Edwin White Gaillard, New York Public Library.....New York, N.Y.
Vice-President—W. L. Brown, librarian, Buffalo Public Library.....Buffalo, N.Y.
Secretary—Maria A. Newberry, Public School Library.....Ypsilanti, Mich.

FIRST SESSION—Monday Forenoon, July 8, 1912

The meeting of the Library Department was called to order in the Directors' Room of the Chicago Public Library by the president, E. W. Gaillard, New York Public Library, New York, N.Y.

After a few words of welcome, Henry E. Legler, librarian, Public Library, Chicago, Ill., read a paper on "Educational By-Products in Library Work."

Julia A. Hopkins, Pratt Institute, Brooklyn, N.Y., then gave "The Plans and Scope of the New Normal Course in Library Training, Pratt Institute School of Library Science."

"The Book That Teacher Says Is Good" was the subject of a paper given by Mary Ely, head of children's and school department, Public Library, Dayton, Ohio.

The committee appointed in San Francisco to consider the best course possible for the improvement of conditions in normal-school libraries submitted its report, "A Syllabus of Library Instruction in Normal Schools."

On the motion of Henry E. Legler it was voted that the National Education Association be asked to print this report in full.

The secretary submitted the following report, which was accepted and placed on file:

I herewith submit the list of members of the National Education Association who may be considered potentially as members of the Library Department. I desire to call attention to the fact that it consists of two sets of members: (1) active personal members; (2) institutional members.

Numerically considered, it is composed of forty active personal members and four hundred and forty institutional; total: four hundred and eighty members. Eleven of these active personal members are connected with institutions which are also institutional members. Six are with state libraries or state educational departments, ten are college librarians, four are high-school librarians, six are connected with public libraries, and only one is a children's librarian.

Geographically considered the four hundred and eighty members come from every state in the Union, barring two, and from Canada, England, Japan, Wales, and New Zealand. Massachusetts has the greatest number, three personal, forty-two institutional; total of forty-five members; with New York a close second, ten personal, thirty-two institutional; total, forty-two. Illinois, our hostess state, has four personal members, twenty-five institutional; total twenty-nine.

Chronologically considered, David Camp, president of the New Britain Institute Library, is our senior member, having joined in 1879. Melvil Dewey, New York, 1892; Francis Austin Kendall, Illinois, 1895; William Reed Eastman, New York, 1896; and Frank C. Patten, Texas, 1898, formed our total active continuous personal membership prior to 1900.

Since our last meeting one active personal and three institutional members have dropped their membership. I desire to recommend that inquiries be sent to these former members to ascertain reasons for discontinuance.

I would also suggest that every effort be made to extend our active personal membership and that a record of school librarians newly appointed and school libraries newly

instituted be kept and invitations to join the National Education Association be extended.

Respectfully submitted,
M. A. NEWBERRY, *Secretary*

The president appointed a Committee on Nominations as follows:

Henry E. Legler, Public Library, Chicago, Ill.
Maria A. Newberry, Public School Library, Ypsilanti, Mich.

A Committee on Resolutions was appointed by the chair as follows:

Fannie D. Ball, Central High School Library, Grand Rapids, Mich.
F. M. Hopkins, Central High School Library, Detroit, Mich.

Meeting adjourned.

SECOND SESSION—THURSDAY FORENOON, JULY 11, 1912

The meeting was called to order by the president in Leon Mandel Assembly Hall, University of Chicago, Chicago, Ill.

Ernest De Witt Burton, director of libraries, University of Chicago, Chicago, Ill., welcomed the Library Department in the name of President H. P. Judson.

The first paper of this session was "The Educated Librarian" by Arthur E. Bostwick, Public Library, St. Louis, Mo., which was discussed by Mrs. C. E. T. Dracass, Englewood High School, Chicago, Ill., and the chair.

"The Use of the Library in Vocational Guidance" was the subject of a paper by Jesse B. Davis, principal of Central High School, Grand Rapids, Mich. This paper was discussed by Mrs. P. P. Claxton, Washington, D. C., and A. E. Bostwick, St. Louis, Mo.

The report of the committee appointed in San Francisco to investigate the condition of high-school libraries in the United States, and to suggest possibilities for increased efficiency, especially in connection with public libraries, was read by the chairman, Mary E. Hall, librarian, Girls' High School, Brooklyn, N.Y.

This report was discussed by A. E. Bostwick, St. Louis, Mo.; Henry E. Legler, Chicago, Ill.; M. A. Smith, Madison, Wis.; Mrs. C. E. T. Dracass, Chicago, Ill.; Mr. Rice, of Madison, Wis.; and M. S. Dudgeon, of the Wisconsin Library Commission.

It was moved, seconded, and so ordered that the report be adopted and placed on file, and that the committee be continued for further investigation.

The report of the Committee on Nominations was as follows:

For *President*—Mary E. Hall, librarian, Girls' High School, Brooklyn, N.Y.
For *Vice-President*—James V. Sturges, principal, State Normal School, Geneseo, N.Y.
For *Secretary*—Effie L. Power, supervisor of children's work, Public Library, St. Louis, Mo.

The report of the nominating committee was unanimously accepted.

The Committee on Resolutions presented the following report, which was adopted and placed on file:

Resolved, That the thanks of the Library Section of the National Education Association are hereby tendered to H. E. Legler and the Chicago Public Library for so cordially extending to us the use of the building, and for all other courtesies.

Resolved, That we extend our thanks to Miss C. M. McIlvaine, and those associated with her, for our delightful automobile ride and tour of the city libraries, and to Mr. A. G. Wheeler for so graciously opening to us his grounds and home.

Resolved, That we express our appreciation of the hospitality of the University of Chicago and the Chicago Normal College, and that we specially thank Miss Irene Warren and Miss M. L. Dickey and those associated with them for their many courtesies and cordial entertainment.

Resolved, That we extend thanks to the Committee of the American Library Association on Co-operation for all assistance given the section.

Resolved, That we express our appreciation to Miss I. M. Mendenhall and Miss M. E. Hall for their valuable reports on normal schools and high schools, and to all others who have contributed to the program of this section.

THIRD SESSION, ROUND TABLE—FRIDAY AFTERNOON, JULY 12, 1912

The Department met in Round Table Conference in the Chicago Public Library and was called to order at 2:30 P.M.

Jessie E. Black, University of Chicago, Chicago, Ill., read a paper entitled "Courses in Literature for Children," which was discussed by Ange V. Milner, Normal, Ill., and Delia G. Ovitz, Milwaukee, Wis.

"Is There Need for a Course in the Choice and Use of Books in Our High Schools?" was the subject of a paper by Florence M. Hopkins, Central High School, Detroit, Mich.

Following this was an informal discussion of questions and topics by members of the Round Table.

The library committees for 1912–13 are as follows:

"Normal School Libraries," Ida M. Mendenhall, *Chairman*, Library School, New York Public Library, New York City; O. H. Bakeless, State Normal School, Bloomsburg, Pa.; Margaret Dold, State Normal School, Chico, Cal.; Willis H. Kerr, State Normal School, Emporia, Kans.; Delia Ovitz, State Normal School, Milwaukee, Wis.; Mabel Reynolds, State Normal School, Cheney, Wash.; Mary Richardson, State Normal School, Castine, Me.; Louis R. Wilson, University of North Carolina, Chapel Hill, N.C.; Ruth Wright, State Normal School, Tempe, Ariz.

"High-School Libraries," Anna Hadley, *Chairman*, the Gilbert School, Winsted, Conn.; F. D. Ball, Central High School, Grand Rapids, Mich.; Ethelwyn Fagge, Polytechnic High School, Los Angeles, Cal.; Lucile F. Fargo, North Central High School, Spokane, Wash.; Elizabeth B. McKnight, Barringer High School, Newark, N.J.; S. R. Parker, Boys' High School, Brooklyn, N.Y.; Katharine Grasty, Eastern High School, Baltimore, Md.; Gilbert O. Ward, supervisor of high-school libraries, Cleveland Public Library, Cleveland, Ohio; Irene Warren, School of Education, University of Chicago; Harriet A. Wood, School Department, Public Library, Portland, Ore.

The meeting then adjourned.

M. A. NEWBERRY, *Secretary*

PAPERS AND DISCUSSIONS

EDUCATIONAL BY-PRODUCTS IN LIBRARY WORK

HENRY E. LEGLER, LIBRARIAN, PUBLIC LIBRARY, CHICAGO, ILL.

Why, gentlemen, if you know neither the real road you are going, nor where you are, nor the road you came, the first thing I have to inform you is that—you have lost your way.—*She Stoops to Conquer*.

One is reminded of this quotation after undertaking a survey of the current magazine literature dealing with a myriad of education topics. It is a discordant chorus that these constitute, indicative of the confusion and uncertainty which exist in the entire teaching profession, embracing those of high and those of low degree. There is evident on the one hand a desire to test new methods, or old methods in new guise, on the other a disinclination to depart from established standards.

The pendulum is swinging, but in a somewhat eccentric orbit.

Never has there been greater interest manifested in school problems among the people as a whole than at the present day, as shown by the prominence they receive in the popular periodicals as well as in the professional press. *The Readers' Guide* for the past year, which indexes 100 magazines, lists 188 articles under this caption and refers to about 80 other headings under which additional articles on special phases of education are grouped. That these articles contain widely divergent views as to methods is of rather less consequence than that there is uniformly a note of sharp criticism as to results. Business men complain that graduates of high schools use slipshod English, and that they can neither spell correctly, punctuate properly, nor write an intelligible commercial letter. College men declare that the high-school boys who come to them are raw recruits out of whom it is difficult to create anything but an awkward squad. High-school faculties are almost a unit in condemnation of the product that comes to them, averring that students are helplessly lost when they try such simple processes as using a dictionary or an encyclopædia. Overburdened and weary grade teachers groan over the multiplied exactions of the elementary and grammar-class curricula. They say that the enrichment of the curriculum has tended to the impoverishment of the intellect. Out of these conditions has grown the universal practice of coaching for examinations rather than educating for life. In an illuminating contribution to the subject, Dr. Henry S. Pritchett has developed the need for a type of teaching and resultant examination that shall test the qualities of the boy's mind and the character of his scholarship rather than the excellence of his drill in a specific field. He says:

> It requires an entirely different preparation to cram a boy's memory with the details of a limited subject from that which is required to give him a fair mastery of the elements of the subject. The high schools have been spurred on by the colleges for many years to drill boys rather than to educate them. It will require some time before they will learn that the new examinations call for the mastery of a few subjects rather than a memorized familiarity with the superficial details of many.

There is, then, if not a revolt against educational policies of today, widespread dissatisfaction with methods pursued and discontent with results achieved. Yielding to the demand for the democratization of education and for better equipment of those untimely called to the struggle for bread and butter, numerous expedients have been adopted to meet the need. One great state university has organized correspondence courses for artisans and workers generally, and another has distributed its "university week" opportunities to many localities within its commonwealth; city school systems are patterning departments after the continuation schools of Munich and other German cities; vocational guidance in others aims to give direction to the industrial training somewhat blindly conducted heretofore; evening schools and other devices are employed to give encouragement and opportunity to the thousands who are unable to pursue school beyond a few elementary grades.

With all this activity to bring educational possibilities, the fact remains that for many economic reasons many millions of boys and girls are getting but a ragged fragment of education.

William Allen White, in a recent magazine contribution, wrote:

> As conditions now exist there comes into the life of the average boy or girl four or five waste years—the years between thirteen and eighteen. These waste years hold in them the real dangers of our democracy. . . . . And yet ten millions of fourteen-year-old boys and their sisters—who are really worth something—are out of school in America today. Partly they are out for economic reasons; the family needs their support; but the state needs a clear mind in the ballot booth seven years later, worse than the family needs support. . . . . But apart from economic forces which keep the boy out of school during the waste years of his life, there are social reasons why he is not in school. And these social reasons are his studies and his teachers, and at the bottom of all, the selfishness of the taxpayers.

Bishop Fallows has pointed out the sore spot in the national consciousness in declaring that 2,500,000 children are working in sweat shops, factories, offices, and stores in the United States. "That this social waste should be permitted on behalf of dividends is," he says, "a disgrace to the lawmakers and law-enforcers of the nation."

Without attempting an analysis of cause and effect, but keenly sensitive to conditions, the libraries of the country are impressed with the need to supply extra-educational facilities to the millions of young people who require them. This applies as well to the young people enrolled in schools as to the youth out of them. The library's educational responsibility therefore looms large—a co-operative agency of major importance in school work, of primary importance in its field unrelated to school work. For this occasion it will suffice to indicate the contact with schools only. The testimony of a teacher may serve to illustrate:

> In days gone by we carried on the school without libraries; we could do this as well as not because education meant learning by rote—textbook learning alone.
>
> From beginning to end of my common-school education—from first grade to eighth, I never saw a school or a public library. We had none, tho I lived in a good-sized city in the Middle West. I learned what the textbook told me; no supplementary reading (or rarely), no pictures, no objects. My training in reading and literature consisted in learning to keep my toes on a crack and my voice from falling on a question mark!
>
> In high school I had very little but the regular text. Again memory work was the test. I remember well a boy who was my ideal. He learned his geography word for word and so recited it. If he sneezed or a door slammed and his flow of words (I use words advisedly) was interrupted he had to begin again. He was the show pupil of our class.
>
> In college our instructors in science performed all the experiments for us while we looked on. When we went to the library we spoke to the librarian thru a wire netting, and in our company manners asked for a book.
>
> In the normal school which I attended there was a so-called children's library but the books were all textbooks, and we were not taught how to help the children use them. We had literature, but it was all about Hamlet's being or not being mad; none of it was taught in a way to make it a tool for the elementary teacher.
>
> After all this I began teaching, with no knowledge of the resources of a library as an aid to either teacher or child, and I felt no need for such aid. What is true of me is true

of thousands of other teachers. You must make us feel our need for you. You must, if you please, intrude yourselves upon our notice. Generations of teachers who have worshiped at the shrine of the textbook can in no other way be reached. The ideals of education today are broader, our needs are greater, and you have the material to help us realize our needs.

So the libraries have attempted to supplement the school. In many ways they have sought to establish the connection, and thousands of splendid teachers have responded with appreciative willingness. Some of the activities which this co-operative method has brought into being are these:

Classroom libraries selected with special reference to age and group capacity are sent for local use and home circulation.

Deposit collections are loaned for periods varying from one semester to a full scholastic year.

Classes are invited to visit the library for instruction in reference work.

Reference lists corresponding to the outlines of history or other school studies are posted for easy reference, and groups of books are placed on reserve shelves for like purposes.

Story hours planned in conjunction with teachers are conducted.

References are looked up for teachers in anticipation of study assignments.

Collateral reading is provided.

Leaflets are issued listing library resources in aid of teachers.

Trained librarians are placed in charge of high-school libraries and give instruction in the use and care of books.

"Intermediate" rooms are equipped to render the transition from the children's to the adult department of the library logical and gradual. In these and in other rooms designated for the purpose, personal aid is given in selection of material for debates and theses.

Collections of prints and photographs are furnished to illustrate subjects in geography, history, art, biography.

This skeletonized summary of library activities closely related to the work of the schools merits fuller amplification than the limits of this paper will permit. On the screens in the adjacent exhibit is illustrated graphically the educational relationship between schools and libraries. Many of the methods yet remain incomplete as to development; some are ineffective because their possibilities are not fully understood or appreciated. Out of them will grow, however, new forces in the processes that make for the common life, the common citizenship, for they will create the common ideals and aspirations which must underlie both. Dealing with masses as we necessarily must, we must also realize that the masses are made up of individuals.

That there should one man die ignorant who had capacity for knowledge, this I call a tragedy, were it to happen more than twenty times a minute, as by some computation it does.

Thus wrote Carlyle in *Sartor Resartus*. In contradistinction may be quoted the testimony of an immigrant girl, type of many thousands of young people whose future is interwoven with the destiny of this republic, which in turn will shape that destiny by what it offers to them.

"To be a citizen of the smallest village of the United States which maintains a free school and a public library, is to stand in the path of the splendid processions of opportunity," wrote Mary Antin in *The Promised Land*. Nor is it less worth while to quote, as evidence that education may be found outside the pages of textbooks, what she related of her life in the slums of Dover Street:

> Truly my education was not left entirely in the hands of persons who had licenses to teach. My sister's fat baby taught me things about the origin and ultimate destiny of dimples that were not in any of my schoolbooks. Mr. Casey of the second floor, who was drunk whenever his wife was sober, gave me an insight into the psychology of the beer mug that would have added to the mental furniture of my most scholarly teacher. The bold-faced girls who passed the evening on the corner, in promiscuous flirtation with the cock-eyed youths of the neighborhood, unconsciously revealed to me the eternal secrets of adolescence. My neighbor of the third floor, who sat on the curbstone with the scabby baby in her bedraggled lap, had things to say about the fine ladies who came in carriages to inspect the public bathhouse across the street, that ought to be repeated in the lecture-halls of every school of philanthropy.
>
> Off toward the northwest, in the direction of Harvard Bridge, which some day I should cross on my way to Radcliffe College, was one of my favorite palaces, whither I resorted every day after school. A low, wide-spreading building with a dignified granite front it was, flanked on all sides by noble old churches, museums, and schoolhouses, harmoniously disposed around a spacious triangle called Copley Square. Two thorofares that came straight from the green suburbs swept by my palace, one on either side, converged at the apex of the triangle, and pointed off, across the Public Garden, across the historic Common, to the domed State House sitting on a height.
>
> It was my habit to go very slowly up the low, broad steps to the palace entrance, pleasing my eyes with the majestic lines of the building, and lingering to read again the carved inscriptions: *Public Library—Built by the People—Free to All.*
>
> I loved to lean against the pillar in the entrance hall, watching the people go in and out. Groups of children hushed their clatter at the entrance, and skipped, whispering and giggling in their fists, up the grand stairway, patting the great stone lions at the top, with an eye on the aged policeman down below. Spectacled scholars came slowly down the stairs, loaded with books, heedless of the lofty arches that echoed their steps. Visitors from out of town lingered long in the entrance hall, studying the inscriptions and symbols on the marble floor. And I loved to stand in the midst of all this, and remind myself that I was there, that I had a right to be there, that I was at home there. All these eager children, all these high-browed women, all these scholars going home to write learned books—I and they had this glorious thing in common, this noble treasure-house of learning. It was wonderful to say, *This is mine;* it was thrilling to say, *This is ours.*
>
> Here is where I liked to remind myself of Polotzk, the better to bring out the wonder of my life. That I who was born in the prison of the Pale should roam at will in the land of freedom was a marvel that it did me good to realize. That I who was brought up to my teens almost without a book should be set down in the midst of all the books that ever were written was a miracle as great as any on record. That an outcast should become a privileged citizen, that a beggar should dwell in a palace—this was a romance more thrilling than poet ever sung. Surely I was rocked in an enchanted cradle.

It is thru the co-ordinate agencies of education—the school and the library—that we may hope to reduce to hopeful elements of ultimate solution the complex problems that lie at the root of our social well-being and happiness. With Ruskin, we may hearten our faith in the strength of social growth and development, by employing his analogy:

By a power of which I believe no sufficient account exists, as each leaf adds to the thickness of the shoot, so each shoot to the branch, so each branch to the stem, and that with so perfect an order and regularity of duty, that from every leaf in all the countless crowd at the tree's summit, one slender fiber, or at least fiber's thickness of wood, descends thru shoot, thru spray, thru branch, and thru stem; and having thus added, in its due proportion, to form the strength of the tree, labors yet farther and more painfully to provide for its security; and thrusting forward into the root, loses nothing of its mighty energy, until, mining thru the darkness, it has taken hold in cleft of rock or depth of earth, as extended as the sweep of its green crest in the free air. . . . .

THE PLANS AND SCOPE OF THE NEW NORMAL COURSE IN LIBRARY TRAINING, PRATT INSTITUTE SCHOOL OF LIBRARY SCIENCE

JULIA A. HOPKINS, PRATT INSTITUTE, BROOKLYN, N.Y.

The rapid advance of the library movement has been indicated in no direction more clearly than by the increasing demand for library training. In 1887 the first library school in this country was opened. In the decade following, three other schools sprang into existence. Today there are eleven accredited schools graduating an average of twenty students annually.

In addition to these schools we have many summer schools of library science, offering short courses in professional training to those who are already in the working ranks and unable to take the time for a full year's study.

The extension of public-library service in our great cities thru systems of branch libraries and deposit stations requires a large force of people to carry on the work. A single one of these great systems will often, in one year, make more new appointments than could be supplied by the graduates of several library schools. Therefore, these libraries have been forced to establish training classes merely to supply their own needs.

So important has this question of library training become in the eyes of the library profession that for many years now, one of the standing committees of the American Library Association has been appointed to investigate and report to the association at its regular annual meeting any significant changes or advancement along that line.

Another very interesting phase has been the development of the normal-school libraries; and, with the increasing closeness of co-operation between public libraries and public schools, there has come a realization of the importance of having some instruction in library methods given to the students in normal schools by the librarian of the school.

In many high schools, also, there are courses of instruction in the use of libraries given by a trained librarian employed by the school board.

In these different ways, then, there is a great demand for instruction in library science; and this entails a demand for teachers of library science, a demand which is becoming increasingly difficult to fill.

In the early days of instruction in library methods, the teaching was largely theoretical; but of recent years librarians and directors of library schools have felt that theoretical knowledge was insufficient. To be effective, it must be reinforced by a wide and varied experience in actual library work. One of the first questions asked by the director of a library school in regard to an applicant for a vacancy on her faculty is, "What has been her library experience?" Yet, practical experience added to theoretical knowledge may still be insufficient to produce the best results. It is not enough for the teacher to know her subject, theoretically and practically; she must be able to impart that knowledge to her students. She must have the ability to make her subject clear, to arouse in her students enthusiasm and instill into them the proper spirit; to develop their powers of judgment, of initiative. It is very rare to find, in one person, the combination of these three desirable elements: wide theoretical knowledge, strong practical experience, and the ability to teach. Therefore out of this need there came to Miss Rathbone the idea which has finally formulated itself in this normal course in library training to be offered by Pratt Institute the coming year. It is the first definite attempt to apply the principles of pedagogy to the teaching of library science.

The course is to be a graduate course, admitting only graduates of library schools of recognized standing. The course will be too crowded to allow of any instruction in actual library methods; the student must have those before admittance. Preference will be given to those applicants who have had practical library experience as well as library-school training. Each application will be considered on its individual merit.

The course will consist of two main parts, the theory of education and practice teaching. The theoretical training will include educational psychology, history of education, especially American public education, normal methods, and sociology. The instruction in these subjects will be given by the department of education of Pratt Institute.

The opportunity for practice teaching has been secured by a plan of co-operation with the Brooklyn Public Library, by which the apprentice class of that library becomes the practice school for the normal students. The practice teaching will be under the supervision of a special instructor. The hearty and sympathetic co-operation of the librarian and staff of the Brooklyn Public Library enables Pratt Institute to offer a very strong course on this practice side.

I wish to take up rather fully the consideration of the course for the training class in order to show its value, as a teaching experience, to the normal students.

1. There will be two apprentice classes each year, beginning their studies in October and March, respectively. This gives each normal student the opportunity of preparing and conducting different subjects each term.

2. Following the four months' course of instruction the apprentices are to have three months' practice work in selected branch libraries of the Brooklyn Public Library system, under supervision of the branch librarians. Much of the technical detail of library methods will be taught them during this practice period, thus eliminating it from the instruction course and permitting the emphasis to be placed on the broader and more cultural side of the subjects.

3. The instruction to apprentices will be given on three days of the week, Mondays, Wednesdays, and Fridays; the other three days to be given entirely to reading and preparation. Full library time is required; this enables Pratt Institute to offer them a course of one hundred and sixty lectures with an average of three hours of practice work in connection with each lecture. This generous amount of practice time means the making of very full and careful reading-lists for the apprentices by the normal students; and a combination of the lecture and recitation method.

4. Taking up the subjects rather in detail: The strongest subject in the curriculum—the foundation, as it were, of the entire course—will be that on bibliography and literature. It is planned with the view to extending the acquaintance of the apprentices with books and authors, and to broadening their literary horizon. The opening periods are devoted to the study of the book, its history and development; how to judge a book; publishers; trade bibliographies; general bibliographies and reading-lists, and the principles governing their preparation. But the main strength of the course is to be placed on the study of literature. Eight periods are devoted to a brief survey of English and American literature. This is somewhat in the nature of a review of ground covered by high-school students, but is planned to give breadth rather than depth of knowledge, the apprentices being required to handle a great many books and classes of books, and taught to get at the gist of a book's contents quickly. Also, when an author is being studied, there will be an evaluation of the books about him, both biography and criticism.

The bibliographic feature will be maintained by requiring the apprentices to prepare short reading-lists on related topics; for instance, when they are studying the period of early English literature, such topics as "chivalry," "the Crusades," "scholastic learning in the Middle Ages," "Chaucer's England," etc.

The different forms of literature will then be studied: the novel and its development; modern dramatists; literary criticism and book reviews.

Several periods will then be given to foreign literatures: Greek and Roman classics; German literature; French literature; other foreign literatures translated into English and widely read, such as Italian, Spanish, Russian, Scandinavian.

The closing periods will take up the literature of subjects: science; history and historians; educational movements and their exponents;

philosophy and philosophers; sociology, etc. The final lecture will be on the librarian's personal reading; for it is hoped that this course will not only acquaint the apprentice with a wide range of literature, but will also give her the personal love of reading.

To add to the value of this course, the course in classification will be run parallel to it, containing the same number of lectures, given on the same days, and following, as closely as possible, the same order of subjects; so that the apprentices, while they are studying about the books in a certain class, will, at the same time, consider the relation of those books to other books and classes of books.

The reference course is planned to give rapid and easy consultation of books, lists, and other sources. Much instruction will be given in methods of work; and much attention will be paid to the study of books in the circulating department which are good for reference use. The order of subjects will be related where possible, to the order of subjects in the literature and classification courses; and a special study will be made of branch reference collections.

The course in cataloging is not intended to teach much technical detail of that subject; but rather the use of catalogs and indexes, and what items in a book need to be brought out for library purposes.

Lesson 1 takes up the authorship of a book, periodical, pamphlet, or document, showing the difference between author and compiler, editor or translator, and describing sources for full names and form of names, the problem being to decide on the authorship of a certain number of books, finding the full or true name.

Lesson 2 takes up the selection or abbreviation of titles. Problems.

Lesson 3 takes up the selection of subject; places to look in a book, in order to find its subject; sources for subject headings, etc. Problems.

Lesson 4 takes up edition and imprint; copyright date; explains the value of these; the problem being to decide on the facts for a catalog card in regard to a certain number of books, and why.

All these periods are devoted to facts about the book without reference to making the actual cards. It is not until the tenth lesson that such matters as indentation, spacing, abbreviations, etc., are considered.

One period is to be given to taking entries from printed catalogs and making them on cards. A great deal of attention will be paid to analyticals, their value and principles of selection, and to cross references, author, title, and subject.

There will be a course of sixteen lectures in work with children, twelve of the lectures being devoted to children's literature. The outline for this course has been made out by Miss C. W. Hunt, in charge of the children's department in the Brooklyn Public Library. She will criticize the lectures as prepared by the normal students, and will personally attend the lectures and criticize the presentation of the material. It is desired to make this

course especially strong for two reasons: first, the inadequacy of instruction in children's work in the library schools, which is natural because of the special Training School for Children's Librarians, conducted by the Carnegie Library of Pittsburgh; second, the bearing of such a course upon normal-school work. One of the most important subjects in a normal-school course in library science should be that on children's literature, and it is therefore of great value that the students in this normal course should have the opportunity to study and teach that subject under such expert advice as Miss Hunt will give.

There will be a course of lectures in the history of libraries, intended to give the apprentices a glimpse of the stretch of library work, with the emphasis, of course, placed on the work of public libraries. (See outline at close of paper.)

There will also be a course on branch work. It is the intention to make this course theoretical and general, applying specific methods later. The main part of it will be given to loan-desk work, with a few lectures on general subjects. (See outline.)

One period each week will be devoted to current topics, the apprentices being required to report on such subjects as would attract attention among a library's readers. In this will also be included discussion of events in the library world and current articles in the library periodicals.

There will be a short course of lectures on general topics. (See outline.)

Now, of what value is this course in providing teaching experience to the normal students?

In the way of preparation for taking charge of training classes in public libraries, its value seems unquestioned, as the course is planned with that special, definite aim.

For giving instruction to high-school students the courses in bibliography and literature, classification, reference, and cataloging are specially fitted and give very adequate training.

For conducting courses in normal schools the same subjects as those for high-school work, with the added subjects of work with children and history of libraries, cover very well the ground essential to such a normal-school course.

For preparing one to teach in a library school, the subjects of classification, reference work, work with children, and history of libraries compare favorably in length and ground covered with those subjects as covered in most of the one-year library schools. The course in loan work is probably stronger than that given in the schools.

The grouping of the subjects for teaching purposes has not been entirely decided upon yet, and will necessarily have to be more or less flexible, depending always in a measure upon the number of normal students registered. But it is desired to give each of the students the entire respon-

sibility of preparing and conducting one of the technical courses, and to divide among them the lectures in the literary and cultural courses.

Turning from the practical to the theoretical side of the normal course, a very satisfactory outline has been worked out with the department of education of Pratt Institute. As the number of students will be so small (the class being limited to six), they will be admitted to the regular classes in the subjects selected for this course; and, by great good fortune, these subjects occur regularly on Tuesdays and Thursdays, the days on which the normal students are free from practice teaching.

There will be two terms of work (48 hours) in psychology, omitting probably the biological side of the subject, brain-structure, etc.

There will be 36 hours of work in the history of education, which will be a general survey of the subject, omitting American education.

There will be 36 hours of work in the theory of education. This will include laying-out of courses, development of subject, presentation of subject to class, methods of teaching, conduct of recitations, quizzes, examinations, etc.

There will also be a special course given by the head of the department of education to the library normal students only. This course will include history of education in the United States, with especial emphasis laid on high schools, normal schools, and colleges; application of general methods to library teaching; mental development of the individual from twelve years of age on; and social education.

In addition to these, there will be supplementary courses for the normal students in library work in normal schools and high schools, with problems in laying out courses, methods of teaching, etc.; and regular seminars in normal methods conducted by the vice-director of the school. The normal students will also have the privilege of attending the lectures given by visiting librarians to the students in the general first-year course.

It is planned to devote the month of February, which intervenes between the two terms of work with the apprentice classes, to visiting near-by library schools, for the purpose of studying methods of organization and instruction.

The month of September will be devoted to the study of the Brooklyn Public Library system under the supervision of the instructor in charge of the normal course. Those students who wish to specialize for librarianship in high schools will have the opportunity to be placed for practical work in some of the Brooklyn high-school libraries, and those who wish to prepare for normal-school work, in the library of the Brooklyn Training School for Teachers. At Pratt Institute, opportunity will be offered for advanced reference work and cataloging.

This is the course, as planned, so far. It is tentative and has yet to be put to the test of experience.

There seems to be a real professional need for such a course, and it is the sincere hope of those in charge that the course will meet and satisfy that need.

BROOKLYN PUBLIC LIBRARY TRAINING CLASS

HISTORY OF LIBRARIES

1. The library profession and its requirements.
2. History of the library movement.
3. The Brooklyn Public Library—its organization and history—Mr. Hill.
4. History and development of libraries in Greater New York—Miss Hitchler.
5. Typical libraries of the United States—public libraries.
6. Typical libraries of the United States—college, reference, and special libraries.
7. State libraries and library commissions.
8. National libraries.
9. Typical foreign libraries.
10. Library organizations.
11. Prominent librarians.

BRANCH WORK

1. Branch libraries; history of their development; centralized administration; comparison of Brooklyn public library system with others more and less centralized—Mr. Brown.

2. Types of branches; the work of a branch library as compared to that of a library in a small town.

3–5. Regulations governing the use of libraries: registration; access to shelves and privileges to readers; fines and penalties; overdue books; mutilation and loss of books; book theft; charging systems.

6. Aids to readers; bulletins, book-lists, etc.
7. Records and statistics; supplies.
8. Selection and ordering of books.
9. Preparation of books for the shelves.
10. Bookbinding; historical, practical.

11. Bookbinding; preparation of books and magazines for the bindery; discard of books.

12. Book-mending and the care of books.
13. Traveling libraries.
14. Deposit and factory stations.

GENERAL LECTURES

Qualifications of assistants; standards of dress, voice, manner, etc.

2. Business methods; business ethics.
3. Personal relations with the staff; with the readers.
4–5. Study of the community; general.
6. Branch communities; local problems, neighborhood reports.
7. Local institutions; museums, art galleries, etc.
8. Unassigned.

THE BOOK THAT TEACHER SAYS IS GOOD

MARY ELY, HEAD OF CHILDREN'S AND SCHOOL DEPARTMENT, PUBLIC LIBRARY, DAYTON, OHIO

There is an opinion current among so large a portion of mankind that any attempt to contradict it is likely to be hailed as folly, that each of us knows himself better than any other could possibly know him. This is true not only of individuals but of classes; so true, that one who is not a teacher can but hesitate before announcing that she means first of all to tell to teachers something concerning teachers, which she believes they do not know so well as she. However, it is nothing new that I wish to tell you, but rather, that I would remind you of something that all of you have known very well at one time, but have forgotten, maybe, partly by reason of the very fact that you see a teacher now from the subjective instead of the objective point of view. It is essential to my purposes this morning that you should once more see a teacher from a child's viewpoint and with that end in mind I am going to ask you to do some remembering with me.

Do you remember, then, the first morning when your mother took you to the school, how you went dreading to find enthroned there a fearful person called "Teacher" whom you pictured to yourself as a very large woman, with a very severe look and, worse than that, a very large stick that descended impartially upon the just and upon the unjust? And do you remember your surprise and joy and the shyness that overcame you when you found this dreaded personage was a gentle little woman with a voice as low and a smile as kind as your own mother's? That was the beginning of many days and weeks of worship at the teacher's shrine. Needless to say, to you in those days her word was law, altho it is true that you yielded to temptation when her back was turned and whispered to your neighbor, having not yet reached a conception of law that is independent of its enforcer.

How far and high Teacher had been removed from the level of humankind in your feeling for her, you never realized until the day when your first slight disillusionment came. It was the day, you will remember, when, in celebration of some departure or arrival in their midst, all of the teachers of your school remained at noon and had a great feast in the basement dining-room. You were delegated by a crowd of eager schoolmates to peek in at the assembly, and so, digging your toes into the gravel firmly—for you had already learned that a push from behind was among life's possibilities—you cautiously peered around a corner into a basement window. And then you made your discovery and announced it in a piercing whisper: "Teacher is eating!" It was after that, of course, that you wrote your composition on "Teacher" and called attention to the fact that her hair was curly in the morning and straight at night. It is notice-

able, however, that in that carefully preserved first literary effort "Teacher" is spelled thruout with a big and shapely capital *T*.

There followed a slow process of evolution by which a teacher ceased to be a superhuman being and came, in your mind, to be recognized as possessing all of the attributes and limitations of humanity, except that she still had a superhuman fund of knowledge. I fear there were quarrels in those days in which you made extravagant claims for Teacher's wisdom as against that of all other wise ones. You still remember, how, on the day when Teacher had translated a Latin phrase, occurring in your reading-lesson, you confidently announced at home, "My teacher knows just everything!"

Once more I need not stop to do more than remind you of the extent of a teacher's influence with you during that period, nor during your later years in school, as, gradually losing your early childish fancies, you came to respect and honor your teachers, not more for what they knew than for what they strove to learn; not more for what they were than for what they tried to be.

Remember with me, now, only one more day at school, your last day in some certain school, when, your vision sharpened by the sorrow of parting from old friends and old associations, you looked back over the years you had spent among them, and things which you had passed at the time unseeing now stood out clearly before your opened eyes. It was then that there arose before you the image of a teacher, no longer a glorified vision, but a picture of a simple, sincere, earnest man or woman, having faults as other men and women have faults, with knowledge that was not unbounded, with judgment that was not infallible, but for all that guiding you in the right path, helpful always and sympathetic maybe, by reason of his very imperfections. To this image in your own heart, this is what you said: "I owe a debt to you which I can never pay, except in one way. Because you have entered into my life that life shall be stronger and better and what you have been to me I must try to be to others."

Now when you have remembered all these things you have remembered something of what a teacher may mean to a child.

"Of the making of books there is no end," and verily in our lives today books seem to be among the common things. We find them for sale in every conceivable place; we have vast free libraries full of them; just for the asking, many of us may have them sent to our very doors. We use them and abuse them in a dozen ways; we scorn the worst and take even the best for granted, until some day we pause to think and to remember as I am going to ask you to remember once more this morning.

Tho you had possessed picture books and Mother Goose rhymes ever since you could remember possessing anything, you were first thrilled with a sense of book ownership when you were given a little brown book that said "McGuffey's First Reader" in large print on the outside and

inside told stories, which you soon knew by heart, of dogs that ran and cats that sat on mats. This book you carefully carried home each night with the First Reader inscription turned out so that he that ran might read and know that you had attained the dignity of a scholar. And this pride of ownership was your first conscious feeling about a book.

Your second idea came in this way. There was a guest for tea, and he and father had some little discussion hinging upon the question of the date of the removal of the capital of a state from one city to another. Now it happened that you had read about that very state and that very city and that very date in your little geography book not three days since, and you looked so eager that father asked you in surprise what you knew about it. So you told the date and settled the discussion and were very, very pleased. Afterward you told your mother confidentially: "The reason why I like books, mother, is because they are such knowing things."

There was a whole series of experiences that gave you your third idea. There were rainy days that to all appearances you spent in your garret playroom that were in truth filled with adventures in far-away lands with Sinbad the sailor and Aladdin and his lamp. There were times when you had suffered some disappointment, when you lost both it and yourself in the pleasures and trials of your friends, the "Little Women." In short, you learned that neither time nor space were limitations when a book had opened up its pages to you.

He ate and drank the precious words,
His spirit grew robust;
He knew no more that he was poor,
Nor that his frame was dust.
He danced along the dingy days,
And this bequest of wings
Was but a book! What Liberty
A loosened spirit brings!

With what a thrill of joy and sense of gratitude you first read those lines, joy in meeting there the thought that had grown up in your own life out of your own experience; gratitude at meeting it clothed in the perfect fitting words that you could never find!

You have surely not forgotten the first book that made you cry. You carried it away to your own room ashamed of your emotion and fearful of someone's finding you out. There you wept unrestrained and lay for a long time after your sobs had ceased, filled with a great vague longing, that was indeed your first real prayer, a prayer that was more than words, a wish unexpressed, that you might be better than you had ever been before, more helpful, more kind, more true. Thus you came to know the inspiration of a book.

It was later, in fact you were quite grown up, when your greatest experience of all came to you.

You had been reading for hours and had entered into your book with your whole being. Thought, imagination, emotion were all engaged to their utmost and as you closed the book and laid it aside you had a wonderful sense of having been lifted out of yourself onto a height, and standing there you looked back and saw—yourself, not thru a glass darkly but face to face. And over and over again you said: "So *this* is what I am. *This* is what I am!" There were no tears now, tho the pain of clear sight was almost more than you could bear. But gradually, humility became tinged with hope and side by side with the vision of what you were, the vision of what you might be, what all mankind might be, took form. Then did you know the great things of the world from the small things, and in those hours of insight began the struggle which was to end in victory by which something that was evil passed out of your life and something that was good took its place. After this you knew that a book might mean more than knowledge, might be more than wings to set you free, might be more than a power to stir your best emotions, that it might be even a divine thing setting your will in harmony with the will of God!

And when you have remembered all these things you have remembered something of the part a book may play in human life.

Yesterday and the day before and many days before in my experience as a children's librarian a child has come to me and said: "I want this book because Teacher says that it is good"; or "Teacher has read a part of this to me and now I want to read the rest." However it be, the book that Teacher has stamped with her approval is the one book that must be had, for a teacher's influence in the matter of children's reading is second only to that of the home and not always second to that. That this influence should be used in the right direction needs no proving; that the book which Teacher says is good should be good is not a subject for debate. Upon a teacher's wise and right choice in the matter depends not only the reading of a particular book, but to some extent the standard which a child sets up in his own mind by which he will test his reading for years to come. There is scarcely one child who does not do some reading that is not worth while and a little that is more than negatively harmful, but if the small group of books which he has read under his teachers' guidance be of the right sort, I believe that they will prove to be a divining rod within his grasp which will sooner or later fulfill its purpose and indicate to him where true treasures lie.

Now let me tell you some facts. Sometimes the book for which a teacher sends a child to the library is the best that the library affords, and we rejoice. Sometimes it is a story of fleeting interest, such as a child would have read without special inducement and have forgotten, and this we give to him with a sigh for the opportunity lost. Sometimes, tho happily not often, it is a book which we do not consider worthy a place upon our shelves; a "thriller" for the boy, of the sort whose continued

reading excites him beyond measure and plays upon his emotions until he goes forth a loosely strung instrument at the mercy of every wind good or evil that sweeps his strings, or it is a story for a girl detailing the incidents of a life of pleasure, dealing too largely with the vanities of personal adornment and outlining dangerous situations from which it refuses to deduce the natural dangerous consequences. When this occurs we are filled with righteous indignation, but indignation that is of short duration, being swallowed up in a great overwhelming pity for the teacher who does not know and for the child who suffers from his lack of knowledge. For there is one thing that is sure beyond all doubt—no teacher who realizes his influence with a child would willingly use that influence to his disadvantage. It is lack of knowledge only that lies at the root of the mistakes that are made.

Since a teacher's time is subject to the usual limitations of twenty-four hours a day while a teacher's tasks and the things he must know and must be multiply without ceasing, one does not easily or lightly add one single "Thou shalt" to the already multiple decalog. Yet to the end that a teacher may use his influence in the direction of children's reading and may use it well and rightly, there is no way but this, that a teacher shall and must know from his own reading some of the best of children's books. It is not sufficient merely to be able to say what is best. If it were, we librarian folk who spend our days with books might give to the teacher lists of best books and notes on best books that would fill all needs. But that will not do. It is necessary that one know the best for himself in order that he may *be* what knowing the best alone can make him. Rejoice and sorrow with Miss Alcott's "Little Women," live over his life with Aldrich's "Bad Boy," weep if you must at the death of Mrs. Ewing's "Jackanapes," thrill at the achievements of Howard Pyle's "Men of Iron," laugh with Alice at her adventures in Wonderland, pluck the posies from Stevenson's "Garden of Verses," and you will not only know something that you did not know yesterday but will be something that you never were before. Moreover, the reading of these books will be a pleasure to you as well as to a child for they are good because they appeal to that which is best in us and therefore to that which is universal.

When and how teachers shall come to know these best books is our problem. It is safe to say that when the importance of such knowledge is once realized a way to acquire it will be found. The day is coming and must come when a course in children's literature will form part of the curriculum of every normal school. To the teachers whose training days are over and whose acquaintance with the field of children's literature may be limited, I, as a representative of the library world, offer all the assistance in our power. Many libraries have issued lists of good books for children that are yours for the asking. These will at least serve as guides to you. From suggesting a particular book for a particular child,

to spending your money for you when you wish to buy libraries, there is no service that we library workers are not willing, nay, anxious to render you. For we believe that these three things abide, the teacher, the book, and the child, and that the great thing of all is the sum of the three, the wise teacher, the good book, and the child happy in the possession of them both.

REPORT OF THE COMMITTEE ON NORMAL-SCHOOL LIBRARIES: A SYLLABUS OF LIBRARY INSTRUCTION IN NORMAL SCHOOLS

IDA M. MENDENHALL, LIBRARY SCHOOL OF THE NEW YORK PUBLIC LIBRARY, NEW YORK, N.Y., CHAIRMAN

What piece of work will contribute most to the normal-school libraries of the country? This was the first question to be considered by the Normal-School Committee. In order to answer the question, it was necessary to know, first, something of the present needs and conditions of normal-school libraries, and, second, what has been contributed by former library sessions of the National Education Association.

Two or three investigations have been made, none of them very thoro and exhaustive, of normal-school library conditions over the country. The results have not been published except as they have appeared in a general way in papers read before the National Education Association. But the investigations have shown something of the tremendous awakening of interest in the subject, since the first report on the introduction of library administration into normal schools, made by Miss Baldwin in 1906, for the National Education Association.

In the very beginning of normal-school library awakening about ten years ago, there were two or three pioneer librarians trying to introduce library instruction into the normal schools. Since then, one or more schools in practically every state in the country are doing something to teach students the use of books and library. Inquiries from schools contemplating library courses have come from all parts of the country to the few schools giving courses. For the last five years requests have been very great for printed outlines of the courses given. Because of this great demand for a printed course of study, the committee decided upon outlining a suggestive library course for normal schools as its piece of work for the year.

The outline does not take the place of previous courses that have been printed: Some excellent handbooks have been prepared that are valuable for use in the technical side of the instruction, among them Miss Salisbury's, of the Whitewater Normal School, Wisconsin, and Miss Baldwin's, prepared for the National Education Association. Mr. Ward's handbook, *Practical Use of Books and Libraries*, and the Newark Public Library *Course of Study*

in the Use of a Library are admirable guides in teaching the use of a library and of reference books. But there is, as yet, no handbook that outlines a course of lessons on children's literature, or a course of library lessons for children. The needs for library instruction of the normal-school student are different from those of the high-school or college student. High-school, college, and normal student all need preliminary library instruction in how to use books and how to use the library. In addition to this, every normal-school student needs to know children's books and how to teach library lessons to children. And a small number of normal students who elect such a course should have technical instruction that will prepare them to organize and administer a small school library.

The course submitted by this committee outlines in brief the library instruction that should be required of every normal-school student and suggests, in addition, the technical course to prepare students to take charge of small school libraries.

This suggested course in fuller form, with assignments, reading-lists, and methods for giving the lessons, is in preparation by the committee and will soon be ready for examination by anyone who is interested. This report of the committee merely gives an abstract of the suggested course in library methods.

Courses in Library Instruction for Normal Schools

I. General course required of every graduate.
The aims of this course are:
a) To make new students at home in the library by teaching them to find what they need without waste of time and to use the reference books and keys of the library intelligently.
b) To acquaint graduating students with the best books for supplementary and outside reading in the grades, that they may be prepared to select the books for a school library and to direct the reading of children.
c) To prepare students to teach children in the grades how to use books and the library.

II. Ten or more lessons for new students on the use of the library:
1. Arrangement of the library: explanation of the decimal classification, call numbers of books, location of different classes of books, pamphlets, picture collection, etc.
2. Use of the card catalog.
3. Use of periodical indexes.
4. Use of bibliographies, such as Buffalo Public Library subject index, Salisbury, *Index to Short Stories*, Granger, *Index to Poetry*, etc.
5. Intelligent use of a book title-page, preface, index, table of contents.
6. Use of general reference books: dictionaries, cyclopædias, gazetteers, yearbooks, etc.

The entering class may be divided into sections containing fifteen or twenty students and the lessons given to small groups of new students conducted thru the library, or seated around a table for explanations. The lessons should be made practical laboratory exercises. For example, in the lesson on the card catalog, all the trays from the catalog can be placed

on the table, and after general explanation of the cards, each student may find in his own tray an example of the different kinds of cards, in answer to questions previously made out for this tray. This is an example of such a set of questions prepared for the drawer containing the letters *P, R.*

How many books has the library by Edgar Allen Poe?
Is there a life of Poe in the library?
Who is the author and what is the call number of *The Passing of Thomas?*
Find two books about Robin Hood.
Find two books containing chapters about Robin Hood.
What bound volumes has the library of the *Pedagogical Seminary?*
What subheads under Rome are to be found in the catalog?
How many books has the library of the *Picturesque Geographical Readers?*
Under what other subjects would you find books related to physical education?
Give the number of volumes, publisher, and date of publication of Roosevelt's *Winning of the West,* and is it illustrated?

As a practical review for the work of this course, a topic for research may be assigned so that the students may learn to exhaust the resources of the library, in both books and periodical literature, on their particular subject. The topics assigned can be chosen from those used by the method and critic teachers in their regular work, such as:

Atlantic cable
Booker T. Washington
Christmas
Irrigation

These reading-lists when completed may be put on file in the library for the future use of teachers and the librarian in looking for material on these subjects. The student learns from such a problem how and where to look for material on any subject, and how to save time by using all kinds of indexes as shorts cuts and aids. After looking up material on one subject, he should feel at home in the library and be able to find for himself material for debates, or for special research topics in methods classes.

III. Ten or more lessons for graduating class:
1. Helps in the selection of books for the school library
   Discussion of some of the best classified and graded lists of children's books: *Buffalo Classroom Libraries;* Miss Hewins' *Books for Boys and Girls*
2. Principles to guide in the selection of books for children
   Collections of poetry
   Nature books
   Fairy tales
   Fiction
   Picture books
   Biography and travel
   History, etc.

Some of the best books in each class should be discussed and compared with some cheap, worthless examples, and thus a standard is gained in the selection of books. For example, in picture books, some exquisite editions,

illustrated by real children's artists such as Howard Pyle, Walter Crane, and Jessie Wilcox Smith, can be shown in the class, and the work of these illustrators compared with some of the cheap imitations and with picture books of the Sunday-supplement type.

Students read several children's books and make reports of different kinds upon them. One report may be from the point of view of the teacher, giving the literary estimate of the book and its use in school work. The following outline may be used as a suggestion for reports of this kind:

1. Kind of book:
   Fairy story, myth, hero-story, nature- or animal-story, book of travel, history, or biography.
   If a story, is it about home-life, school-life, sea, war, adventure, etc.
2. Literary merit of the book:
   Plot: Is it loose, simple, complex, involved: impossible, overdrawn, etc.
   Characters: wholesome, natural, well bred, too good, morbid, lifelike, well drawn, etc.
   Motive or theme: human sympathy, moral courage, valor, friendship, character building, commonplace, etc.
   Style: Is the English correct, pure, slangy, babyish, in dialect; language figurative, conversational; vocabulary simple, stimulating.
3. Use of the book:
   Adapted to what age; most interesting to boys or girls; for children's outside reading; supplementary reading in school; for story-telling; reading aloud; dramatization; intensive study.
4. Physical make-up of the book:
   Binding, paper, type, index, illustration.
5. Estimate of the book.

Another kind of report may be made for the purpose of introducing the child to the book and making him wish to read it. Book reports of both kinds should be given in class, and the student should also observe book talks given to the children in the grades of the training school.

The students should also give practice lessons to the children, or see such lessons given. In the first three grades library lessons may be given on how to care for books, and how to open a new book. Beginning with the fourth grade, lessons may be given on the arrangement of books, call numbers, the use of the catalog, the dictionary, and the use of the title-page, index, and table of contents. The seventh and eighth grades and the first two years of high school should have lessons on reference books and periodical indexes.

In addition to these library lessons the reading interest of the children may be aroused and directed by means of a library period each week. Student teachers should always be present at these periods in the library and help the children to find books.

IV. Course for teacher-librarians:

This is an elective course of two years open to ten or fifteen students. The minimum requirement for entrance is a high-school course, including four years of English. The aim of this course is to prepare teachers to direct the reading of the children in the grades, to give lessons in the grades and high school on the use of books and the library,

and to administer a small school library in addition to some teaching of high-school English or history. A graduate from this course should receive a teacher's license and is not fitted to fill a public-library position.

This course gives one period a day during the two years to library instruction or practical work. It includes instruction and practice in cataloging, classification, and all the technical processes of library work, a course in children's literature and practice teaching of library lessons in the grades and high school.

THE EDUCATED LIBRARIAN

ARTHUR E. BOSTWICK, LIBRARIAN, PUBLIC LIBRARY, ST. LOUIS, MO.

Education intended to improve and systematize the use of an institution may be directed to those who administer it or to those who use it. It should obviously take both directions. If in our engineering schools we should omit to teach the use of logarithmic tables and then appoint a special officer whose duty it should be to look up and supply logarithms for all comers, we should be doing very much what we actually are doing in our teaching of literature, where we omit to explain the uses and advantages of such tools as are to be found in the library, relying on the aid and instruction to be given by library assistants themselves. Obviously, if the librarian must take time to do this he must omit to do many things that are more important. He finds himself in as hopeless a position as would the umpire of a baseball match who should have to teach all the players the game before it could begin. The librarian's duties, and hence his training for those duties, are affected in more ways than one by the possession or lack of library knowledge on the part of his clients. It is so in school; the more the pupils know, the less coaching the teacher has to do, but the less possible is it to get along with a teacher who knows only the elements. The better educated the congregation, the more scholarly the clergyman that they will demand. All this is obvious, especially to such a body as this; yet I believe that the interdependence of these two kinds of library education—for use and for service—has not been sufficiently insisted upon.

For many years it has been impressed more and more on my mind that vocational selection is even more important than vocational training. A born physician may get along with inadequate training, but the best training is thrown away on one who cannot use it. Proper selection and the proper training of those selected are both needed, of course, and they are intimately connected. No one can select with his eyes open until he has been led over the ground to start with. And especially is this necessary in selection for librarianship. In no occupation, perhaps, do more unfit persons present themselves, and more fit ones fail to apply, largely because the public does not understand the requirements. In a booklet of information issued by our own library in an effort to better this state of ignorance occurs this concluding paragraph:

To those who are fitted for it, library work offers a congenial field of employment. It does not pay as well as teaching and the vacations are not as long, but it has peculiar attractions for those who are interested in education outside of school. It requires good health, strength, an even temper, quickness of apprehension, and resourcefulness. It is not work adapted to those deficient in education or to those who by reason of advancing age, or limitations of any other sort, find it difficult to obtain other employment.

Such obvious information as this would not be necessary if the requirements of library work were generally known even as well as are those of medicine, or law, or engineering. It would not be necessary if school instruction generally included information regarding the functions and use of the library, so that such instruction serves the treble purpose of making the use of books in a library easier to those who receive it, of setting free for other needed work the time of the librarian, and last but not least, of informing the student sufficiently to make his choice or rejection of librarianship as a profession an intelligent one. And as the library must look chiefly to high-school graduates to fill the ranks of its assistants, especially of the lower and medium grades, it is in the high school that this instruction should be chiefly given.

And I am convinced that if library instruction in the high school is directed as if it were to be entirely for this end, it will carry the other two objects with it. In other words, if every high-school student is given the kind of information that will enable him to decide whether he is fitted to become a librarian, he will at the same time be better fitted to use the books in a library. In the few remaining words that I shall have to say I shall devote myself to explaining and attempting to prove this thesis.

What are the things that a student needs to know about libraries to enable him to decide whether or not he would like library work? We find that persons who apply for such positions are deficient in four kinds of knowledge about the work—knowledge of its physical requirements, its educational requirements, its technical requirements, its personal requirements. They are apt to think, for instance, that a girl who is too feeble to serve in a shop, or too nervous to teach, would make a perfectly good library assistant; that one may in a few weeks master the technique of the library, from classification system to stackroom construction; that if one is able to read the books he handles, or at least the titles on their backs, he has a library education; and finally that ill-temper, a desire to have one's own way, and inability to gain the liking of one's fellow-workers are no bars to advancement in a library, tho they might so operate in a school, a store, or a factory.

I should like to see the Senior year of a high-school course embrace four lectures, one on each of these requisites. In the first, the physical strain of library work would be emphasized—the fact that its vacations are 70 per cent shorter than those of the teacher for instance, that its hours are longer; that the library assistant is much on her feet, standing, walking, or running; that she must reach up to high shelves for heavy books and

down to low ones; that she must often work until a late hour at night. I would have all this emphasized by practical instances where persons physically unfitted for the work have broken down under it, until it is made clear that library work is no work for the weak, whether from youth or age; that it requires robust health, buoyant spirits, the enthusiasm and temper that are inseparable from a sound, strong, mature body.

In the second lecture I would have it made plain that if there ever was an occupation requiring very full and detailed information, not only on the ordinary topics taught in schools, but on matters of current interest and on special subjects such as technology, art, music, and foreign literature, it is that of a library assistant. The library places on its shelves the literature of all subjects: there is not one of those subjects that the library assistant may neglect. She must know about all of them, even tho she may not know them; their authors and their titles must both be fixed in her memory. The lady who studied physics in 1883 or the man who knows only one period of European history will not do: the librarian must have at least a working library knowledge of pretty nearly everything under the sun. This I should like to see emphasized by a recital of a few score of questions such as are propounded to an ordinary librarian in an ordinary working-day—questions whose answers, even if he does not know them, he must know where to find, on penalty of loss of reputation both for himself and for the institution that he represents.

In the third lecture I would have enough said to explain the mass of technical material that may be known, even if it is rarely all known, by the modern librarian. I would have it made clear that he might spend years, for instance, in studying the various systems of classification that have been proposed or used, or even the practical application of the one of these that has been chosen for his own library. I would emphasize the recent great extension of the library into adjacent fields, making it necessary for the librarian to know something of school and university curricula, museums, art galleries, civic and social organizations, child welfare, etc.; and I would dwell on the business side of his work, which requires that he shall be more or less familiar with the ins and outs of the book and binding trades, the different phases of building construction, and the organization and administration of a staff of workers.

In the fourth and last lecture I would call attention to the fact that the librarian comes into closer touch with the public than any other of its employees. His touch with the child is almost as intimate as the teacher's, and in addition his relations are close with the adult, as the teacher's are not. He cannot assume the teacher's authoritative attitude. Attendance on his institution is voluntary, yet support of the institution depends largely on public opinion and he must treat every reader as his employer. I know of no other employment where tact and a pleasing address are so necessary, and necessary so constantly. The librarian may be a repository of knowl-

edge, general and technical: if he has not geniality, forbearance, a love both for the work and for those on whose behalf he is doing it, he is a misfit. He might have passed muster in 1850; he will not do for 1912. Nor would I neglect the whiter side of the shield. The lecturer should point out that the modern changes and extensions in the work of libraries have made modern librarianship a peculiarly up-to-date profession. Nowhere, I believe, may one come into contact with work and workers of so many different kinds as in the library; nowhere may one get the wide outlook that may be obtained there by one who desires it. A knowledge of its fascinations will serve to attract the fit, as that of its difficulties and requirements may act to repel the unfit. All these things would I have clearly set forth.

Now how, in placing all this tactfully before the high-school student, may we at the same time make it easier for him to use the library tools—to extract what he wants from the books without having a library assistant continually at his elbow?

The difficulties encountered by the library user to whom the library is a new thing are not many, nor are they serious, tho they may appear so. They include difficulties with library machinery and difficulties with books as such. The reader has trouble with the assistants; he misunderstands the regulations and thinks they are intended to impede and annoy him; he is not familiar with the disposition and functions of the various departments, with the classified positions of books on the shelves, with the arrangement of the card catalog. All this, and more like it, is the result of unfamiliarity with the levers and cogwheels of the library. Again, he does not know in what kinds of books to look for what he wants to find; he is ignorant of when to use a gazetteer, when an atlas, when a government report, when a general cyclopædia, or a special technical dictionary. And when he does know the kind, he is generally ignorant of individual characteristics: he does not know when to look in the *Century Dictionary*, when in the *International*, when in the *Standard;* he is unaware that the *Britannica*, the *American*, and the *Nelson's* cyclopædia has each its good points, and what those good points are.

To take up first the second of these classes of difficulties, a large amount of this ignorance of books has nothing whatever to do with their library use. Surely a high-school graduate should know the difference between an elementary botany and a comprehensive treatise and should not expect to find in the former what he can get only in the latter. He should know one dictionary from another and a dictionary from a cyclopædia. He should be able to make a thousand distinctions of this kind, whether he has received any specific library instruction or not. I have seen educated adults who did not understand fully the principles of alphabetic arrangement. Matters of this kind are topics of general education; the library must assume that all who come to it are familiar with them. It is not prepared to teach boys to read or to impart to them information that should be almost as elemen-

tary. What I am saying may almost be extended without impropriety over the whole class of difficulties that has to do with the use of books. High-school students should be taught to use them, but so they should be taught if there were not a single public library in existence, just as they should still be taught to read in such an event. Now that every high school has its own collection of books, embracing most of the commoner kinds of reference works, instruction of this kind has become easier to give and is less frequently neglected.

Such information about the use of books that relates specifically to books found only in large libraries, such, for instance, as government reports or the transactions of learned societies, may well be given in one of the lectures which treats of the librarian's educational equipment, general or technical. In explaining, for instance, how necessary it is that the librarian should know what to find in public documents it should be easy to enumerate some of their useful contents, and so on.

In regard to the other class of difficulties—those relating to library machinery—explanation of the physical and personal requisites for library work will greatly lessen the student's chances to run afoul of this machinery. If he is made to understand the nature and quantity of the librarian's task and the way in which it must be done, the danger of friction between him as a user and the librarian as an administrator is measurably avoided. He comes to understand the necessity for the kind of rules that the library makes and enforces; he learns that there is such a thing as classification, and he finds out what system the library employs, how and where the books are shelved, and how the catalog is made and used. He learns this, it is true, in a very general way; but definite teaching and practice could not be expected in the high school, and if only the student is interested and is told where he can get further information, he will be apt to look it up. He may find opportunity to do so, in some degree, in his own high-school library. Tho for its own purposes such a library would not be organized and arranged like a public library, it may well depart a little from its own sphere for the sake of accustoming its users to some of the difficulties—to some of the necessarily more complex mechanism—that they are sure to encounter in the larger institutions. In such high schools as house regular public-library branches this plan may be carried out easily and well.

In short, a few lectures on libraries and their work, pitched more particularly on the vocational key, will be apt to give, and at any rate can be so adapted as to give, the student all the information regarding his own use of the library that a high-school student could expect to obtain.

A scholar is one who is related to school work either as teacher or learner. In the same way I would enlarge the content of the term "librarian" to include not only the administrator but the serious user of a library. It is desirable that both these kinds of library-workers should be educated for what they are to do, and I believe that the first steps that may be taken

in this direction in the high-school course can be taken toward both goals at the same time.

THE USE OF THE LIBRARY IN VOCATIONAL GUIDANCE

JESSE B. DAVIS, PRINCIPAL, CENTRAL HIGH SCHOOL, GRAND RAPIDS, MICH.

The charge is often made that the curriculum of the American high school is mediæval. To prove the verity of this statement, one needs but to look into the average school library. We find more books telling of the manners and customs of the ancients than of the business methods of today; more relating to the history of wars and dynasties than to the great industrial movements of modern times. The shelves are filled with the accepted writers of classic literature from all the centuries of the past, but we find very little present-day literature dealing with the vital issues of life. This condition is in no way the fault of our librarians. The books to be found in the school library are there at the request of the teachers, and the teachers are the product of a mediæval system.

However, tradition in education, as in religion and politics, is rapidly giving way to reason. The transformation of our schools is taking place so rapidly that we sometimes doubt the wisdom of it all. Conservative as we may be, we are forced to realize that a new order of things is with us and that it is our duty to direct the reformation as wisely as we may. The school library of the future will again be the proof of the extent of the transformation, and, I believe I am safe in saying, will be the proof of the educational value of the new curriculum. When our schools have outgrown their cloister days, and are aiming to prepare our boys and girls for the life that they must live in the work-a-day world, the library will be the open door to the progress and opportunity of the present.

One phase of the modern movement in education has gone so far that we are now forced to recognize that it makes two demands upon our public schools. One is the demand for vocational guidance; the other for moral guidance. By vocational guidance, I mean the process of aiding the pupil to a better knowledge of himself, and of opening his eyes to the wide field of opportunity that is before him, and of aiding him in preparing himself for that career in which he believes he can render the greatest service. Success, whatever that may mean to the individual, is the goal which every youth entering the high school confidently expects to reach. Upon graduation he sets sail with great faith in his public-school education. Often, however, he finds that he has launched his bark without chart or compass, and that he can but drift thru life because, during his preparatory period, he was never urged to take serious thought of the direction in which he should go to reach the harbor for which he was best fitted by nature. We should not wonder that the world is filled with misfits and that but comparatively few men call themselves truly successful.

The trend of education today is forcing upon our boys and girls, very early in life, the decision of questions of vital consequence. At fourteen and fifteen years of age, they are confronted with a choice of ways that is most confusing. Upon leaving the grammar school, or at the legal age, they must decide between the high school and the office, or the shop. If their choice is the school, will it be the technical, the commercial, or the academic high school? If necessity forces them to work, shall they accept the job with the best immediate pay and no future, or the one for which they have some natural ability and in which there is a chance to grow? These are important questions that are very hard for unguided youth and unthinking parent to answer. Upon leaving high school and even college, these same questions are frequently not yet answered. Vital as the problem is, the schools have hitherto failed to give it serious attention, but now that our eyes have been opened we must assume the duty of guiding our pupils thru the mysteries of the ever-increasing vocational opportunity.

The second claim upon our attention is the need for guidance in the development of the moral qualities that are necessary to success in any career. There is always a demand for the right kind of men in every vocation. We have experimented with this problem of moral instruction for many years without signal success. The courses offered have been too abstract, too brief in their influence, or too limited in the number reached, and they have been lacking in real application to the lives of the pupils. State and national committees are still at work upon the problem, and however this question or that of vocational guidance may be solved, the library will perform a most important function.

In response to these demands, about four years ago a plan was originated in the Central High School of Grand Rapids, Mich., for directing our pupils toward a better preparation for their life's work. We called this plan "vocational guidance." As the scheme was gradually developed, it also proved to be a very satisfactory course in moral training, and at the same time solved some of the problems of the teaching of English composition, in which department the plan was executed. In this school all pupils are required to take the subject of English thru the entire four years of the high school. Written and oral composition form a part of the work in each year, and it is thru this work that the vocational and moral themes are introduced. In obtaining material for these themes the school library plays a most important part. The collecting of new books and pamphlets and the necessary co-operation between the teachers of English and the librarian have brought new responsibilities to that office.

Logically, vocational guidance begins below the high school. Before the boys and girls come to the point of deciding which of the ways lying before them they will take, they should spend some time in studying and writing upon the subject of the "Value of an Education." Every phase of what it will mean to them to leave school should be made plain. Special

study of their vocational aptitudes and possibilities should be made by the teacher in order that the best of counsel may be given. This means that in every grammar-school building there should be a select number of books to aid both pupil and teacher. Thru the branch libraries and by special arrangement with the public library, these needs can easily be cared for.

Following the outline of the Grand Rapids school plan, the general topic for the ninth grade is "Elements of Success in Life." During the first semester, a study of the biography of successful men and women is made for the purpose of finding the elements of character and habits that made for success in their lives. Such a study also serves to stir the pupil's ambition early in his high-school course. For this purpose there should be a careful selection of biographies. They should be brief, easy for the fifteen-year-old youth to read, and should cover a wide range of human achievement.

The second semester of this first year has for its keynote the theme "Know Thyself." Most of the compositions are autobiographical, aiming to draw out from the pupil a better knowledge of his own abilities, tastes, habits, and opportunities. The books accompanying this course should be largely inspirational. Titles such as *The Secret of Success*, *Pushing to the Front*, and *Starting in Life* are suggestive of the type of book most useful. There are a large number of authors whose works are helpful. I need mention but the names of Russell H. Conwell, E. H. Griggs, O. S. Marden, and William Mathews to illustrate the character of the books used.

The largest demand upon the library comes in the second year, in which the central idea is the "World's Work." In this list should be enough books to give the student as wide a view of the call of the world as possible. There are a few books of a general type that are intended to guide young people in the study of vocations. These books need to be very wisely selected, as the title does not always signify its usefulness to the inquirer. To illustrate this point, the boy who is thinking of becoming an electrical engineer, and who knows nothing at all about the life or duties of this profession, should not be sent to a technical work on some engineering problem. The teacher as well as the librarian should know the content of a book before it is given to such a pupil, for he is simply looking from the outside to find out what it will mean to him to attempt to be an electrical engineer. This principle applies to all books selected as a basis for students' reading in the preparation of their themes.

In connection with the study of vocations, it is very helpful to have a card index devoted to the subject. Each occupation should be classified and should have one or more cards containing the needed information. They should include references to the best books dealing with the subject, references to magazine articles, and data relating to the status of the occupation in the community. Under the direction of the teacher, and aided by the librarian, the pupils themselves can derive much benefit

from collecting the material for these cards. The average high-school pupil has a very meager idea of the number of vocations that are open to him. Such an index, cataloging two, three, or four thousand, or even several hundred occupations, is in itself a broadening influence, especially if the pupil has helped to make it. This system provides constant opportunity for student work, as the index must be kept up to date and made to grow from year to year.

The themes of the fourth semester are on the subject of "Choosing a Vocation." The idea carried out here is to apply the pupil's study of himself, of his own character and ability, to the particular vocation for which he seems to be best fitted. The High School Teachers' Association of New York City and the Vocation Bureau of Boston have published some pamphlets along this line. There are also a number of very helpful books to be listed under this heading. Possibly the most suggestive book to be found is one written by Frank Parsons under the title, *Choosing a Vocation*. *The Times and Young Men*, by Josiah Strong, strikes the keynote in the call to service. From the standpoint of moral guidance, one idea should not be lost sight of, namely: that the man who attains the greatest success in life is the man who is of the greatest service to humanity in whatever occupation he may be found.

After choosing a vocation or deciding upon a certain general division of occupations as a possible future choice, it is necessary to begin to plan definitely the best course of immediate action; so in the first semester of the third year, we deal with "Preparation for Life's Work." If this means going to college or some technical school, the library should afford the pupil the catalog that will guide him toward the best that the country offers. On the other hand, if he is planning to enter the fields of commerce or industry, the material is very difficult to find. The Boston Vocation Bureau has published a few pamphlets on the *Machinists' Trade*, *Banking*, etc. Similar pamphlets are now being prepared on other occupations. There are also a number of very helpful books and magazine articles to be found. However, this field is yet to be satisfactorily developed. There should always be a local survey of vocations for those who will seek their living in the home city. While making this material preparation there is one idea that should not be neglected: that preparation in character is necessary in every calling. The student should see that the employer is as much concerned with the kind of boy or girl that he hires as with the particular training that he or she may have had. It is the adaptability to circumstances, the dependability of character, and the power to grow into something better that bring success in the business world. Books that make this thought clear are particularly helpful.

In the second semester of the third year, the topic is "Business Ethics." The idea is to develop an appreciation of the moral responsibilities of the individual in his particular vocation. Each profession, each business has

its peculiar code of ethics that should be understood by the one thinking of entering that field. There are many articles in the magazines and a few very good books to be listed under this caption.

The Senior year is devoted to the study of social ethics from the point of view of the individual in his vocation. This is for the purpose of giving a personal application to the morals taught, and a concreteness that cannot be obtained in any other way. During the first semester, the underlying theme is, "The Individual and Society," and during the second, "The Individual and the State." A large number of books will be found that are helpful in this division of the work. The only care that needs to be taken is that they are of an uplifting nature and are within the understanding of the pupils.

The library should set apart a section of shelves and a table in the reading-room for vocational guidance, arranging the books according to the outline of the work used by the classes in English. This portion of the library will become very popular, as the students are very enthusiastic over these discussions. The public library will always be of great assistance to the school library, duplicating and supplementing the work. The Grand Rapids public library has proved a very valuable factor in the development of our plan. In their October bulletin of 1911, they published a very complete bibliography on vocational guidance. Several thousand copies were furnished the school, so that each pupil and teacher could use it as a manual of the course. It contained a brief description and outline of the work, followed by the bibliography arranged to follow the work of each semester. A complete manual and revised bibliography will soon be published.

Time will not permit me to describe the full plan of vocational guidance as conducted in our school. I will merely state that other departments than English have opportunities to give attention to the vocational aim of the pupils in their classes. There are special teachers known as grade principals or session-room teachers, who have made a special study of vocational counseling, and the principal of the school acts as chief counselor. In Grand Rapids a committee of the Association of Commerce acts as a vocation bureau, assisting in the gathering of data for the use of the pupils and acting as a kind of employment clearing-house between the high school and the business world.

We no longer consider our work of the past four years an experiment: it is now a fixed part of the curriculum. Its results are seen and felt in the atmosphere of the school. Students and teachers bear witness of the benefits to be derived from the course. Pupils are taking their work more seriously and with greater purpose, resulting in a higher standard of conduct and efficiency. Teachers are appreciating the opportunity that is theirs of doing something more than imparting information—of sharing in the greater work of molding lives.

The school and the public library afford the laboratory for the work done in vocational and moral guidance, whatever plan may be followed. Schools that do not have the four-year course in English composition can still follow the general outline as a course of reading, and may possibly enforce the reading by requiring a vocational thesis each semester. The plan may also prove suggestive to the rural schools and communities which are today well served by libraries. The success with which any plan is carried out will depend largely upon the sympathy of the librarian and the liberality with which the library is equipped. In the new era of public education just beginning, we shall expect the library to take its proper place, and to assume its full responsibility in helping the American youth to find a life of true happiness and real success.

DISCUSSION

Mrs. P. P. Claxton, Washington, D.C.—The paper under discussion is "The Use of the Library in Vocational Guidance." It never occurred to me, nor would it to any librarian, I believe, but that the public library should be a great factor in vocational selection and training. In fact it should help in many ways to determine these things by bringing the right books or information to the right boy and girl, and I hold that it is the business and duty of a well-equipped or even not well-equipped public library to keep in touch with all educational and social agencies and every other agency for the uplift and betterment of mankind and make it a point either to help in movements started or to start a good one. If the library is not asked to enter helpfully into these things, or if the public, the clubs, organizations, or schools are indifferent, go to the people, to the factories, the shops, the schools, the homes, to the public, and especially to the trade schools, and insist that the library has the wares that will help and that these wares are for all—the benefit of all.

I feel that assistance given by the library to any man or woman in any line of work is helping a vocation, for any work done by a person to earn a livelihood, whether it be the teaching of English literature, the French language, or carpentry, or cooking, is vocational. I take it that whatever a man does to earn a living is a vocation. So the discussion is not, "Shall the public library aid in vocational training?" but how to do it more speedily, effectively, and adequately.

This brings me to a phase of vocational and recreational work in which I am more interested than in anything else just now, and that is the work of the free library in rural communities. If the library is needed in the city where there are so many educational and recreational agencies, how much more is it needed in the country or small village? If about 70 per cent of the population are still in the country and small towns, it is high time to bring the public library directly to this 70 per cent.

Grown people and children the whole world over need for their best development companionship and mental diversion, and when they do not have them they rush off from the country to the cities, there often, by the sudden mental change, to fall into evil ways and ruin. Statistics show that many country people fill the asylums from sheer loneliness, depression, and want of companionship or mental diversion from the daily drudgery, which would not be a drudgery but a wholesome, profitable, pleasant work in which every normal soul glories if there is, at intervals, diversion and a mental uplift and spiritual outlook. The public library now has a great opportunity to help make the "back-to-the-farm" movement more vital and successful and to bring light, happiness, and recreation, and mental stimulus to the farmer boy and girl, man and woman.

For no man is friendless, alone, or idle when he has a good book. There is only one way adequate to give the farmer and the small village dweller good books, and that will come thru a public library owned and operated by the county, the building to be well equipped with reading and restroom where the country people may come, rest, read, and select the desired books to be borrowed for a week or month for home reading. The library building should be located in the county seat or the largest town in the county and be maintained by the people as are the schools. The circulation of books thruout the county could be partly carried on by rural free delivery and if it is necessary have branches or deposit stations at the crossroads store, schoolhouse, church, or even in the home if no other place is available. The country schoolhouse should not only be a depository for the school library but should be a public library for the whole community around; then it would open its doors alike to the grown people and children for library purposes and other purposes such as study or other intellectual recreation; it would be a community center, radiating a good influence the year around instead of for several months and in the mornings only. In buying books for this county library no attempt should be made to get each one of the late books "just hot off the griddle," unless they are most worthy, but to purchase a number of copies of a good wholesome book which may give a whole community a lesson in truth and clean recreation.

People in the country have time to read, they do not have the diversions of city folk, and they read better material and digest it too. I want to make the plea that the people of the National Education Association of the Library Section make it their purpose and duty to help this movement and bring vocational and recreational books thru the county public library to the people who need them most, and who will get the greatest good out of the least expenditure of money.

REPORT OF THE COMMITTEE ON HIGH-SCHOOL LIBRARIES

MARY E. HALL, LIBRARIAN, GIRLS' HIGH SCHOOL, BROOKLYN, N.Y.

Your committee respectfully submits the following report of its study of high-school libraries and presents recommendations as to possibilities of increasing their efficiency and promoting closer co-operation between school and public library.

Our inquiries were along two lines: (I) conditions existing in city high schools; (II) possibilities of aid for high-school libraries from outside sources, public libraries, county libraries, state library commissions, and state boards of education. Over 250 questionnaires were sent out and replies were received from 118 high-school principals in 61 representative cities of the United States, also from 30 librarians of public libraries in our largest cities, 27 state library commissions, and from many state and city superintendents of public instruction. All have been most generous in sending not only full replies but sample copies of lists and other printed aids which might be of service to those interested in the use of the library in school work. The material on state and county aid to high-school libraries is so valuable that we regret so brief mention must be made of it in this report. It is hoped this material may be used in a supplementary report at next year's meeting. The loans and gifts of printed matter for the exhibit have been listed and the gifts of publications will be used each year

in the exhibit which the section will have in connection with the annual meeting.

The replies show that our high-school libraries are passing thru a period of readjustment—like the college and public libraries they are finding that old library methods do not meet present needs. The twentieth-century high school with its broader curriculum and change of methods of teaching from the exclusive use of textbook to a full use of the library as a laboratory and an important aid in all its work is making demands which require radical changes in the organization and administration of the school library and closer co-operation with the public library. School boards and school superintendents are beginning to recognize this and a well-equipped library with a large reading-room in charge of a specially trained librarian is a feature of some of our most progressive high schools. High-school principals and librarians of public libraries realize that this library within the school building can do some things for teachers and pupils that the busy public library outside the high school cannot do after school hours. The constant need of consulting books of reference during the school day and the opportunity which the free study period affords for reference and reading justify the existence of the school library in addition to the public library. It affords opportunity for the librarian to personally direct the library reading of the students, and, in co-operation with the teachers, meet the special needs of each pupil as an individual.

In this reorganization of our high-school libraries two tendencies are noticeable:

I. In libraries under the board of education the tendency is to adopt as high a standard for the librarian as for the teacher in the matter of education and special professional training, and to recognize the librarian as a member of the faculty as in colleges and universities. The trend of affairs points to the creation of a library department in the larger city high schools with more than one trained librarian and with student assistants as in the college.

II. There is a growing tendency to organize the high-school library as a branch of the public library under the joint control of public library and board of education. A brief special report of this new movement will be found under the heading "co-operation with public library."

This new type of high-school library which is coming into being has four distinct functions to perform. It must serve as—

1. A great central laboratory for the work of all departments.

2. A training school for the instruction of students in the intelligent use of books as tools; a means of saving the pupil's time in his use of the school library and preparing for the best use of college and public library.

3. A center for general culture and inspiration, a means of cultivating a taste for good reading and widening the horizon of the pupil.

4. A direct connecting link between high school and public library, encouraging membership in the public library and constant use of its greater resources in connection with high-school work.

THE LIBRARIAN

The old idea that the mere clerical work of passing out and receiving books and maintaining order are all that is required of a school librarian is rapidly giving place to a larger conception of the librarian's office. While the majority of our high-school libraries are still in charge of the principal's clerk or a teacher who can give only part time to the work, high-school principals and school superintendents are beginning to realize that the work requires the full time of at least one person and some special library training. The demands of the modern high school call for certain definite qualifications on the part of the librarian which may be summed up as follows:

a) Broad general culture, for she must know in general what the teachers in the different departments know in detail.

b) Special bibliographical knowledge, for she has the responsibility of building up a collection of the best and most suitable books for the purposes of the school work. She must also be competent to compile reading and reference lists for teachers and pupils.

c) Executive ability and special training in library methods so that she may organize and catalog all printed matter in the school building—books, pamphlets, clippings, pictures, etc.—and make it available at a moment's notice.

d) The teaching function of the librarian calls for ability to give instruction to students on the best use of a library.

e) A personality which will enable her to interest and inspire the students, to work in harmony with teachers of all departments and co-operate with them in their efforts to influence the reading of the pupils and facilitate the discovery and development of the students' individual interests and tastes.

We find the librarian giving instruction to pupils in classes and groups, conducting reading-clubs after school, giving definite courses in cultural reading as in the Detroit Central High School, and influencing the reading of pupils thru articles in the school paper and talks at the general assembly of the school.

As a rule the most effective and progressive work is being done by librarians who are graduates of our best library training schools and in addition have had successful experience in the reference department or children's room of a public library, or library experience in secondary schools or colleges. Many of our large city high schools are requiring graduation from a one year's course in an approved library school; this insures the broadest training. The following statement is submitted, grouping the librarians according to their training for the work.

Of the 118 high schools reporting, the librarians may be grouped as follows:

I. Graduates of a one-year course in an approved library school—30.

NOTE.—This includes high schools in Rochester (2), Albany (1), New York City (8), Newark, N.J. (1), Philadelphia (1), Cleveland (2), Dayton, Ohio (1), Joliet, Ill. (1), Oak Park, Ill. (1), Denver (1), Spokane (2), Berkeley, Cal. (1), Baltimore, Md. (2). The figures indicate the number of library-school graduates in each city.

II. Librarians who have had training and experience in a public library or in a school or college library managed according to modern library methods—total 30.

III. Teachers who have had a brief course in library methods at a normal school or summer library school. Most of these give only part time to the library—total 17.

IV. Teachers, clerks, students who have had no library training—total 41.

Of these 118 librarians 40 are college graduates and 10 have had partial courses at college.

Where the requirements and work of the librarian warrant it, the tendency is to place the librarian on a teacher's salary basis. This is advocated by the New York state education department in the last report of Commissioner Draper, where it is suggested that the state grant the same quota for an approved school librarian as for a teacher.

BUILDING UP THE LIBRARY: APPROPRIATION FOR BOOKS, BOOK SELECTION, ETC.

An annual appropriation of from $300 to $500 for the purchase of books is reported in our most progressive high-school libraries. Rochester, N.Y., Spokane, Oakland, Cal., and the larger high schools in New York City average from $700 to $800 per annum for books and periodicals. Albany, N.Y., Los Angeles, and Seattle report still larger sums. As a rule this appropriation is made by the city but in some states there is a state grant, as in Connecticut, New York, Oregon, Wisconsin, etc. New York grants $250 per annum to each high school for school library and apparatus. Many cities make no appropriation for the high-school library, and even in some of our largest cities there is available only the meager sum of from $25 to $50, and frequently no regular grant of money. In many cities the libraries are hampered by the fact that funds are available only once a year for the purchase of books, and new books cannot be bought when needed.

Usually the selection of books is made by a committee of teachers or heads of departments and must be approved by the superintendent of schools. In many cases money is wasted for lack of proper knowledge as to best editions, best methods of buying, etc. Several states aim to aid in this selection of books for a high-school library and print for distribution lists of approved books. Such lists have been published by state education departments or library commissions in Oregon, Wisconsin, Iowa, Minnesota, North Carolina, etc. In schools in charge of trained librarians books are selected on the recommendation of teachers and principal, but the librarian has the final responsibility of rounding out the collection and deciding what books shall be purchased.

LIBRARY ROOMS AND THEIR USE

Many new high schools report spacious and attractive rooms equipped with approved library furniture, card catalog, vertical file, cases for lantern slides, mounted photographs, etc. These shelve from 5,000 to 10,000 volumes and have a seating capacity for from 40 to 150 students at a time

according to the size of the school. Some of the largest and best equipped high-school library rooms are in the new high schools of New York City, in Spokane, Los Angeles, etc. Spokane and Pasadena report three rooms, a large reading-room, a smaller room for debate work, consultation with teachers, talks to classes, or for accommodating files of pictures, pamphlets, etc., and serving partly as a workroom, and a small room as office for the librarian. In large high schools these three rooms are all greatly needed and this should be the plan for such libraries in the future. As a rule pupils have free access to the shelves, but there are libraries in some large cities where the old system of closed shelves still obtains. Some schools report no library reading-room at all and others only a seating capacity for 10 or 20 students in large high schools of over 2,000 pupils.

These rooms are used for reference and reading during school hours, for lectures to students on the use of books and a library, for a study-room for pupils after school and in the evenings (occasionally), for evening high-school pupils and social center work in the evenings (in the Polytechnic High School of Los Angeles). After school, librarians conduct library reading and debate clubs, give informal talks to pupils on good books to read, etc.

Statistics show a greater number of readers in these school libraries than in reference and reading-rooms of the same size in many public libraries. Many schools report a reference use of the school library by from 150 to 300 pupils daily and some report 500 to 700 pupils a day. These figures do not include those who merely come to borrow books for home use.

INSTRUCTION OF STUDENTS IN THE USE OF A LIBRARY

Next to the introduction of the trained librarian (and largely as a result of that) the most important feature of the modern high-school library is the definite and systematic instruction of students in the use of a library. This means the saving of much time formerly wasted in using reference books because of ignorance of how to get at information quickly and intelligently. The lectures given by librarians and teachers include what every educated person ought to know—use of various kinds of indexes to books and periodicals, special points in the use of encyclopædias, dictionaries, atlases, card catalogs, etc. College librarians urge this as a necessary preparation for Freshman work, and librarians of public libraries feel it will make possible continued self-education after students leave high school. The time saved to the students during the four years fully justifies the use of the six or eight study periods needed for this instruction. There are available in print three outlines which can be easily obtained: (1) a course for normal-school students on the use of a library published by the Newark Public Library, Newark, N.J.; (2) a *Manual for the Practical Use of Books and Libraries*, by G. O. Ward, published originally for the use of the Cleveland high schools; and (3) an *Outline for Eight Lessons for High-School*

Pupils in the Use of a Reference Library, which may be obtained from the principal of the Central High School, Detroit, Mich., for the sum of four cents. Among the schools giving fullest recognition to the importance of this work and including it in the course of study or giving credit for it as a part of the English work are the following, which give from four to eight lessons during the four years: central high schools of Detroit and Grand Rapids, Mich., Cleveland, Ohio, Newark, N.J., Passaic, N.J., Spokane, Wash. Excellent work is being done in many other schools where fewer lessons are given. At least two lessons are usually given during the first year in most of the schools reporting this instruction and many librarians and teachers recommend that as far as possible this instruction be given early in the high-school course, at least during the first and second years. Thirty-seven of the 118 schools give one or more lessons.

CO-OPERATION WITH PUBLIC LIBRARY

Aside from a very general use of the public library for debating material and other reference work reports show that high schools are far behind elementary schools in the matter of co-operation with the public library. High-school principals and teachers are not yet as a body making the use of public-library privileges which ought to be made. Many rarely visit the public library or know its resources. Reports indicate that at most not more than 75 per cent of our high-school students have cards in the public library—50 per cent is the estimate given by some libraries. The most important work school librarians have to do is to reach the 25 per cent or more who do not use a library and help them to realize what a means of self-education and enjoyment the public library may be. The highest point yet reached in this movement for co-operation between high school and public library is in the establishment of branch libraries in high-school buildings.

HIGH-SCHOOL BRANCHES OF PUBLIC LIBRARIES

(Special report by G. O. Ward)

During the last three years the experiment has been tried of placing the high-school library under the administration of the public library. The cities and number of high schools on which this report is based are as follows:

Cleveland, Ohio (6 schools), Newark, N.J. (1), Madison, Wis. (1), Passaic, N.J. (1), Portland, Ore. (2).

These libraries range in size from 1,300 to 9,000 volumes and in seating capacity from 30 to 60 persons. Only two are reported as open to the public, most of the librarians opposing that practice as interfering with school work.

The following facts are suggestive to those in other cities who may consider adopting the plan:

1. The librarians in four cities are appointed by the public library, and in the fifth (Newark) by the board of education. One public library (Cleveland) has found it necessary to organize these libraries as a department under a supervisor.

2. The salary is generally paid by the public library. In Newark it is paid by the board of education and in Passaic by board of education and public library jointly.

3. In four cities the public library furnishes the books and makes a regular appropriation for this. In the fifth, Portland, the board of education appropriated $10,000 a year for the first two years for books for high school and classroom libraries and in the future the public library will pay for the books. In some cases, as in Cleveland, the reference books are bought by the board of education or by the school itself.

The close connection with the public library is shown in all cases by the frequent deliveries of books from the public library, some schools reporting a daily delivery to the high school.

All of the high schools prefer the administration by the public library to independent school administration. The results are: better service than these schools had before, economy to the city in eliminating unnecessary expense in duplication of books, the promotion of unity in the educational system, and the guaranteeing of the administration of the school library by an expert. Seeing that the money spent is in any case the city's money, the intrusting by the board of education to the public library of a fixed sum to be applied toward salaries or books or both commends itself as promoting economical administration. The idea of a high-school library branch is growing, as is shown by the decision of the state board of education in New Jersey to permit, subject to the approval of the local school board, any school library to be administered by the public library. Twenty-one libraries in New Jersey have taken advantage of this ruling.

OTHER WAYS IN WHICH PUBLIC LIBRARIES AND HIGH SCHOOLS ARE CO-OPERATING

As the great majority of high-school libraries are under the administration of the board of education rather than the public library, the following report is submitted of ways in which the two libraries are working together.

1. To encourage membership in the public library, the Boston Public Library, with the co-operation of the high-school principal, sends a representative once a year to each high schoo to take applications for library cards. The Girls' High School of Brooklyn took a census of the entire school to find how many pupils had public-library cards and to ascertain to what branches they belonged. This is done now as students enter the school and they are urged to belong to the public library as necessary for their school work.

2. The public library of Washington, D.C., sends a personal letter to the home address of every high-school student on graduation calling attention to the public library as a means of self-education, of increasing one's efficiency in business, and as a source of pleasure.

3. Public libraries are loaning large numbers of books, sometimes from 300 to 500 at a time, for use during the entire school year or for a term or shorter period. High schools are made deposit or delivery stations for public-library books. Frequently there is a daily delivery by public library or by messengers sent from the high school for books collected for the school at the nearest branch. Traveling libraries are being used both by the school librarians and by individual teachers.

4. The New York Public Library has a permanent bulletin board in every high school. Seattle sends a one-page bulletin to the high school each month.

5. In Brooklyn, N.Y., a conference of librarians of high school and public library was held and a definite scheme of co-operation was drawn up. Librarians from the Brooklyn Public Library are invited to the high school to address clubs and classes and speak to the assembled school.

6. In Binghamton, N.Y., high-school teachers are invited to meet the public-library staff and discuss ways in which the library can serve the high school. High-school classes are given instruction in the use of reference books at the public library.

7. In small cities and towns the public library frequently classifies and catalogs the high-school library and aids the teacher in caring for it. In California these same small high-school libraries are aided by the county library in matters of book selection, book-buying, cataloging, etc.

8. High-school teachers and librarians of public libraries co-operate in preparing reading-lists for high-school students in Newark, N.J., and Grand Rapids, Mich. Much more of this should be done.

Your committee presents these various ways of increasing the efficiency of high-school libraries with the hope that each city may find suggestions for the solution of its own high-school library problem. In many cities the public library branch in the high school will be the solution where it adopts a liberal policy toward the school library. The arguments in its favor are very strong and deserve serious consideration. In all cities where it has been tried high-school principals and teachers indorse this plan as most satisfactory to all concerned.

Conditions in some cities will probably make continued control of the school library by the board of education advisable. Many principals feel there are strong arguments for this, as it permits greater freedom to adapt library methods to the needs of departments or of particular kinds of schools. The problems of the school library are more those of the college library than of a large public library. The status of the librarian as a teacher makes possible a larger salary than can be offered by the public library as a rule and should insure the appointment of some of the ablest graduates of our colleges and library schools.

Believing that the high-school library may be made one of the most influential factors in the work of the modern high school, we offer the following recommendations:

I. For cities of the first and second class the adoption of a standard of educational and professional qualifications which will raise the status of the high-school librarian from that of a clerk to a recognized place on the faculty, as has already been done in some high schools and in most colleges and universities; that these cities require college education or its equivalent and, in addition, graduation from a one-year course in a library school approved by the committee on library training appointed by the American Library Association, and such library experience as will insure successful work with high-school pupils.

II. That in smaller cities and towns where this standard is impracticable the high-school librarian should have some brief course in library methods approved by the state library commission. This course might be in a public library, a normal school, or a summer school of library economy.

III. That high schools incorporate in their courses of study a definite and systematic plan of instruction in the use of books, and that credit be given for the work.

IV. That cities and states make annual appropriations for the growth of high-school libraries and that these funds be so managed that they may be drawn upon as needs present themselves instead of once a year as at present.

V. That an effort be made to bring about closer co-operation between school libraries and public libraries; that the high-school library be made a branch of the public library where this makes for greater service to the school; that in all other cases librarians of high schools should co-operate with librarians of public libraries in devising a definite scheme of co-operation whereby the work of each shall be clearly defined and duplication of expense and effort may be avoided.

Respectfully submitted,

MARY E. HALL, *Chairman*

Committee

ETHELWYN FAGGE, librarian, Polytechnic High School, Los Angeles, Cal.
ANNA HADLEY, librarian, Gilbert School, Winsted, Conn.
MARY E. HALL, librarian, Girls' High School, Brooklyn, N.Y.
FLORENCE HOPKINS, librarian, Central High School, Detroit, Mich.
GILBERT O. WARD, supervisor of high-school branches, Cleveland Public Library, Cleveland, Ohio.

NOTE.—A tabulation of statistics has been prepared showing conditions in the 118 high schools, state and county aid to high-school libraries, etc. This may be borrowed in typewritten form from the chairman of the committee.

ROUND TABLE CONFERENCE

COURSES IN LITERATURE FOR CHILDREN

JESSIE E. BLACK, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

I have been asked to read a paper on the courses I am giving in the Department of School-Library Economics in the University of Chicago on "Literature for Children." As twenty minutes is the time limit, I shall plunge at once, without introduction, into the subject.

It is a most flattering commentary on the varied appeal and the adaptability of library work when I say that I give practically the same course, planned originally for the library school, to three types of people—or at least give the thing in three ways. The economy of using the same stuff in three ways must appeal at once to the saving soul of the librarian! First, "Literature for Children" is given to the class of young people, Senior college students in the School of Education Library School, in training for library positions. Second, it is given in the University College (a college of the University having its lectures in the heart of Chicago for the benefit of busy people who cannot conveniently go out to the university campus) to a mixed class consisting of principals of schools, teachers from the kindergarten to the high school, librarians in normal schools, in children's departments, and the like. Third, it is one of the correspondence courses of the University of Chicago, where it is designed for teachers, parents, writers for children, settlement workers, and especially for librarians in active work the country over. As with the other two courses, regular university credit leading to a

degree is given for this work. Indeed, so general is the demand that part of the material has been cast into popular form such as: "The Book as the Tool or the Beginnings of Research"; "What Your Child is Reading or Missing"; "Dramatic Instinct; the Play's the Thing." These are given in different towns as single talks or as groups of lectures to "parent-teacher" and similar organizations.

These three courses, tho differing in the emphasis and arrangement of material presented, owing to the very natural difference in preparation, point of view, and motive of the students who enter, are, after all, curiously even amusingly alike. In three things, at least, they are identical. The courses all aim (1) to give a survey of the field of literature for children; (2) to get at the principles underlying the selection of such literature, and (3) to deal concretely and practically with certain problems of selection. They all attempt to organize and to give new meaning to the mass of literature already used by the student as well as to direct his study along new lines. No doubt this likeness is another cheering proof of the unity of intention and effort of the home, the library, and the school! Altho, no doubt, it must always remain for the teacher to make the personal, the individual selection of books, and the librarian to do the more generalized work, yet for the sake of the most intelligent work in her particular field it is coming to be expected more and more that the teacher should know about the general realm of books and the librarian to supplement her technical library knowledge with more of the "pedagogy of the book."

But why should the student in a library school have such extraordinary emphasis placed on the pedagogy of children's reading? Why such training for power in making study of the individuality of the child and the things that tend toward his better development as recognized by educators? These college students certainly know something of books; the library course will give them technical knowledge. Why carry with them the literature for children into the realm of psychology? They are not to be school-teachers! Why will not the current requirements of ability to order, classify, and catalog juvenile books, and a thoro knowledge of approved reading-lists of regular librarians, serve? Both the librarians and the teachers present will understand the reason when I explain that the Department of School-Library Economics in the University of Chicago School of Education, directed by Miss Irene Warren, is one of the first library schools to specialize in its field. This specialty is the field of librarians of school libraries and work with children in public libraries, the work (prophetic in a way) of normal, high, or elementary school library departments—any library from the kindergarten thru the high school where the work is with the child.

The librarians have done the magnificent work which makes such a course possible. Largely owing to them we have the children going to the library, the excellent methods of cataloging, indeed, the entire organization related to the distribution of the book. Yet the library is only one factor in the great social scheme; the school is but one. We make a more efficient worker when we train a person with the dual interest of library and school.

There are thousands of excellent courses in literature given over the length and breadth of the land—literature of given periods for example, of poetry or prose; there are thousands of courses in child-study taking up the physical, the mental, and the moral development of the child. There are also courses dealing directly with the best methods of listing, circulating, and selecting books for children. Now to bring these elements together—there's the point: to look at the child and the book as a unit—that is what is needed in this, the "era of the child."

We frequently see, on the one hand, the teacher who has taken these courses in literature for the mature mind (and enjoyed them, too), also those on psychology and child-study, giving her a theoretical as well as a practical knowledge of what the child needs and enjoys, apparently quite innocent of knowledge of books for children either classic or modern. On the other hand we see the librarian skilled in the matter of book

lists, technical methods of handling children's books, far from confident on questions of pedagogy touching these very lists.

"True! but what's the remedy?" is your response. My solution, in direct answer to the needs of the library class already mentioned, and the need you will agree is general, was, with the help of the head of the library school, who knew intimately the library situation and its needs, to organize the course in "Literature for Children." The pragmatic nature of the course is due to the fact that my own personal experience has been in elementary and normal schools with a dash of library work, as well as in the University of Chicago. Such a course should be given in every normal, every library school to the students who are to be teachers or librarians, or, in communities where that is impracticable, public lectures popularizing certain of the most vital topics might be given for the benefit of the parents, teachers, and librarians of the town.

The course, as I am asked to run over it lightly, starts with the child—the child, the reader of the book—gives an idea of what he really is as a unique being; of the adolescent with his "reading crazes"; of the factors such as home, school, library, Sabbath school, clubs, moving-picture shows, that help to form his activities and his interests, all briefly, of course. This is basic work. Then follow the few essentials of the psychology and hygiene of reading—just how the act of reading is accomplished and what are the best conditions for it according to modern investigations.

Now we have an idea of the *child*—the composite he really is; what of his *book?* That is, a sketch of the history of literature designed for children. What, from the time of Comenius, who wrote the first picture book for children, of Newbery, the first enthusiastic publisher of juveniles, has been the development of the book for the little one? The Colonial period with its religious instruction for babes, typified in the *New England Primer*, the eighteenth century with its sentimental or priggish tales, bring us up to modern times and ideals. What with us constitutes good material or poor stuff? And the discussions on book lists follow.

Then indeed are we embarked on the sea of literature on which children may sail. A study of Homer's *Iliad* and *Odyssey*, of Æsop's *Fables*, contributions from Roman life and literature, the Anglo-Saxon *Beowulf*, the German *Nibelungenlied*, oriental *Sohrab and Rustum*, Bible heroes, all from the point of view of use with the child, continue the course. The consideration of "characteristics of the child" in the early part of the course gives something of a measure of judgment of the value of the fairy, the folk, and the beast tale as they are considered, gives a basis for selection of Norse and Greek myths, for example. Yet when Mother Goose and poetry for young children or the Arthurian cycle for the older child are under consideration, the book lists are made from the point of view not only of what is appropriate for young people under varying conditions, but from the distinctively librarian standpoint as well—which are the best, the cheapest, or the best illustrated editions. The various lists, as the Pittsburgh lists, homemade lists, cheap editions lists, and the like, constitute a line of work growing out of the study of the actual books or selections to be used.

Another topic inherent in the pedagogical aspect of such a course is the best means of presentation, of bringing, as it were, the boy and the book together. Does a particular selection make its most lasting appeal when told as a story? Should another be read to the child, studied by him? And so on. What are the elements in a selection that make it appropriate at a given age? "At the dawn of adolescence I am convinced that there is nothing more wholesome for the material of English study than that of the Arthuriad and the Sangraal—Roland—and Robin Hood," says Stanley Hall in his book on *Adolescence.* Is he right? Why is it that literature, essentially dramatic, is eagerly accepted because of that vivid, moving quality? Is the dramatic the foundation of all arts? If we regard literature as an art, producing joy because of its beauty, where in our scheme shall we place the useful books written primarily to give information?

Questions such as these remain open during the quarter; they aid in forming the habit of "suspended judgment" so essential in work of a constructive type.

The students are interested to discover, partly thru their reading, partly by recollecting their own childish experiences and by testing the children within their reach, the truth of the reflection made in the *Quarterly Review* as far back as 1844: "A genuine child's book is as little a book for grown people cut down, as the child himself is like a little old man." They begin to appreciate wise old Dr. Johnson's remark that "Babies do not want to hear about babies; they like to be told of giants and castles and of things which can stretch and stimulate their little minds."

Gradually they feel the force of Charles Dudley Warner's contention:

As a general thing I do not believe in books written for children. Most of the books of this sort seem to be a fatal mistake, enfeebling to young minds. They never acquire the taste, then, for robust, healthful reading such as the *Iliad*.

Another fruitful topic is the comparison of our sporadic efforts in America with Germany's organized supervision of the reading material given to its young citizens, where a national committee is empowered to sift the yearly output of juvenile literature, to reject the worthless, to comment on the remainder, and to publish suggestive lists. The Germans insist that the child's book must be a work of art, that it must be considered from the standpoint of education (1) to instruct, (2) to uplift, and (3) to delight.

I have often thought that if the student preparing for school or library work were to give more attention to the study of the classics for children, the very selections themselves, instead of material great in itself but remote from children's interests, the familiarity with the actual material and the enthusiasm for it would be a valuable asset when they faced practical work with the young people. Such material is beneath the dignity of no one; indeed the best of children's literature was not written for them but appropriated by them. A study of certain of these favorites, *Robinson Crusoe*, *Gulliver's Travels*, *Arabian Nights*, and the like, written for adults and seized by the young, makes one of the most interesting sections of the course.

All of the forms of literature, too, are represented in this work; narration, description, exposition, and so on, all appear; for a selection of the best things for the young, not for the primary grades alone, but for the adolescent as well, must include all forms. There are lyrics and ballads that throb rhythmically with the pulse of the young person. The dramatic instinct inherent in the normal child calls for a survey of modern plays for the child. Shakespeare for the young we are beginning to find more important than Shakespeare for the old! And so it is in the field of history and biography; but time does not permit lingering.

Certain details regarding the conduct of the course may be of interest. The list of required texts for the course is very small; of suggested books and articles very large. Most of the books can be found in any public library; many may be borrowed from the children themselves. Emphasis is placed on re-using, re-viewing the books the student read as a child as well as upon the survey of new juveniles.

Such a course is necessarily a reading-course. The great number of books and articles to be consulted make selective reading (ignoring much and absorbing the important little) the best method of study. Yet all this reading is directed toward practical ends; when the institutional factors that affect the life of the child are under discussion each student offers the class a bit of original investigation: for illustration, as a study of the children's reading-room in a certain social center, an account of a boy's gang with its smuggled books.

It is expected that the body of notes taken during the course will form a nucleus sure to enlarge when the student takes up her active library work. Indeed it is hoped that the entire course, suggestive rather than exhaustive, as you must see from this brief survey, will furnish some inspiration for the librarian or for the teacher when engaged in the greatest work in this world—work for the betterment of the children.

IS THERE NEED FOR A COURSE IN THE CHOICE AND USE OF BOOKS IN OUR HIGH SCHOOLS?

FLORENCE M. HOPKINS, CENTRAL HIGH SCHOOL, DETROIT, MICH.

The high-school library, like the high-school boy, is a problem by itself. Let us call in the doctors, the doctors of philosophy, Dr. G. Stanley Hall and Dr. Huey. The doctors say that adolescence is

an age of skipping, of sampling, of pressing the keys lightly. What is acquired is not examinable. . . . . School pressure should not suppress this instinct of omnivorous reading, which at this age sometimes prompts the resolve to read encyclopædias, and even libraries, and to sample everything to be found in books at home. Along with it, but never suppressing it, there should be some stated reading, but this should lay down only kinds of reading, or offer a goodly number of large alternative groups of books and authors, and present wide liberty of choice.[1]

Being convinced of these truths, a course was organized in Detroit Central High School last year entitled "Books." The aim of the course was to help pupils to grasp books as wholes; to see and examine many books; to read quickly; to focus correctly; to skip judiciously; to read interesting selections together from the books themselves; to run over tables of contents of many books, with no detailed lesson following; to check important books for future reading in the American Library Association catalogs and other book lists; to know how to find details when needed; to create a desire to become accustomed to meeting many books, as we do many people, some to help us practically, some to amuse us, some as speaking acquaintances only, some as closest companions, some as old aristocratic family friends to be deeply reverenced, some simply to make a crowd.

The course was offered as an elective in the Junior and Senior years, and the work was credited as a three-hour course on the same basis as literature, or history, or any other subject was credited. The class met in the library in the afternoons for two sixty-minute periods weekly. The course was outlined under the ten main divisions of the decimal classification of libraries as the best means of approach, for the majority of libraries, both college and public, are so classified. The leading books of reference, reviews of best authorities, selections from representative books were taken up under each division as seemed best for pupils of high-school age whose time, ability, and opportunity were closely limited.

The introductory lessons were based mainly upon certain chapters in Richardson's *Choice and Use of Books*, the essence of which was indicated by marked passages. This was done as a beginning for training in rapid reading. Many times, when books examined were long or difficult, they were previously marked, for young people with limited time can seldom extract the essence without spoiling the flavor. Training of this character helped the pupil very much in discriminating and in finding the essentials in dry articles.

No more reading was required for this course than for any other three-hour course, for "old Father Time" is as stern with his young children as he is with us adults who rebel against his rigid rule. Less reading, rather than more, was urged; and the bad effect of mental indigestion often contracted from "best sellers" was made a prominent point for discussion. Pupils were urged not to read books too far above them, or to have the slightest semblance of false pretense, but to try to grow into the power of wanting real literature, rather than the absorbing mediocre. One of the mottoes of the course was, "Taste can be developed." Three planes of reading, as outlined by Dr. Wenley for a library conference last fall, were emphasized. We can read and enjoy books, said Dr. Wenley, on three planes: books below our level, such as children's books; books on our level, such as most of the current publications; and books above our level; but

[1] Huey, *Psychology and Pedagogy of Reading*, Macmillan. chap. xix, *passim*.

we can grow only by reading those above our level. Pupils respond to this grading, for it takes away no freedom, and does not preach; it simply reveals the laws of growth, to which we must comply if we are to develop intellectually.

Each division of the library classification was first approached thru some simple selection or quotation intended to contain the meaning and spirit of the subject. The briefest possible outline, suited to pupils of high-school age, was made of important material, and it was required that this outlined skeleton, which constituted a lesson of fair length, be mastered as carefully as any other lesson would be. The scholarship and experience of high-school pupils is not broad enough to enable them to handle many books profitably without some foundation.

The skeleton outline required for the first of the ten divisions of the library classification, that of general works, included important encyclopædias; general bibliographical guides; the best magazines and their indexes; publishers' catalogs; and many other simple principles, necessary to the intelligent use of a library.

Under philosophy an effort was made to awaken a response to its essential spirit, and to reveal its earnest search after truth, by reading in class parts of Plato's famous figure of the cave, in the seventh book of his *Republic*. As pupils begin to understand the figure of the chained mind in a darkened cave, mistaking shadows for reality, a flash of real response shines out in their young eyes. Leibnitz' term and principle of pre-established harmony is easily made a part of the vocabulary by reading his illustration of separate clocks kept in perfect time because they are so constructed that they work in accord with universal laws; or of his musical instruments, each playing his own part, yet kept in perfect harmony thru the master-mind of the composer. Pupils enjoy these, and many other, bits from real philosophy. Later in life even without a college course to help them, they may realize

> How charming is divine philosophy;
> Not harsh and crabbed as dull fools suppose,
> But musical, as is Apollo's lute.

What books the library contained on the subject of philosophy were put on the table for pupils to look over; a very little carefully indicated reading was required. With a number of psychologies before the class, a talk was given on the deep scientific study men have made of the laws governing the action of our human mind. Some of the leading chapter headings were read over to reveal methods of treatment. James' chapter on "Habit," which had previously been marked, was required reading.

The skeleton for the third division, religion, presented great religious founders, such as Zoroaster, Confucius, Gautama, Mohammed; and sacred books, such as the Vedas, Avesta, Koran, Book of the Dead, etc. Many selections were read from them and maxims and quotations compared. Time was taken to run rapidly thru Gayley's *Classic Myths*, each pupil having a copy before him. As the pages were turned one by one attention was called to the most prominent myths, and the point emphasized that if one is to enjoy much that is best in literature and art he should be familiar with classic mythology. Girls, especially, respond to the suggestion that they read these stories to young children, and books giving them in simple language were examined and noted. It was required that the outline, at least, of the most prominent legends and myths, such as the *Nibelungenlied*, the Arthurian legends, the *Iliad*, the *Odyssey*, and the *Aeneid*, the Theban cycle of myths, and all myths included by Hawthorne, be perfectly familiar.

Under the division of sociology, an effort was made to have the pupils feel that they were part of a great age which was awakening to human interests and brotherly love to an extent never before known in the history of the world. As the Renaissance of the fifteenth century emphasized divine love thru the portrayal of the Madonna and Child, the renaissance of the twentieth century is being expressed thru civic interests, legislative care of dependent classes, international peace, and in a hundred other ways. Such magazines as the *Survey* and *Charities* were used as examples. The marvelous system of education,

with concrete examples of their own benefit from it, was shown to be a vital part of this great subject. Pupils delight in a rapid survey of the development of education, and really enjoy short extracts from such books as Butler's *Meaning of Education*, Spencer's *Education*, and other selected material if they are left free to catch the spirit of it and are not required to recite upon it too closely. With very little direction the life work of such men as Comenius, Rousseau, Herbart, Froebel, Pestalozzi, could easily be recognized and correctly placed by the class. Under the topic government, a few sentences from the first book of Plato's *Laws* interested the class in seeing that over two thousand years ago the secret of all national government was realized in the government of self. In this division, as in each of the others, when possible, pupils were sent to the shelves to determine what books the library possessed on the subject. Often a carefully selected number of books were passed around the class promiscuously, each pupil taking any one, spending five minutes in examining it, and then reporting on it as best he could, judging wholly from the table of contents, index, publisher, and general arrangement. Such exercises as these revealed an unexpected power on the part of the pupil to grasp books as wholes.

The skeleton for the subject of philology included a comparison of the prominent English dictionaries, a few chapters in Tucker's *Our Common Speech* on the development of dictionaries, and a number of prominent philologists, such as Littré, Murray, Müller, Whitney, Grimm brothers, and others. Grammars, rhetorics, books of synonyms, and as many desirable books as were practical and available bearing on the subject of language were passed about the class for rapid examination.

A very general survey of the growth of science was traced by means of the table of contents of Buckland's *Short History of Natural Science*. As different subdivisions of the subject were discussed, all desirable books obtainable were placed in the hands of the pupil for rapid examination; such as astronomies, books of popular scientific reading, books on trees, gardening, wild flowers, animals, insects, etc. Pupils were urged to read simple books on subjects which they had not taken in school, and thus to introduce themselves to the fairyland of science. All of Darwin's books were placed on the table to reveal the extent of his work, attention being called to the epoch-making *Origin of Species*, and to the tables of contents of many others. Brief biographies of prominent scientific men were given to different pupils and an outlined schedule formed.

Under useful arts, books and magazines on domestic arts, cooking, engineering, commerce, business, etc., were passed about the class for five-minute examination and brief report.

The subject of fine arts was one of the most fruitful. Three skeletons were used under this division, architecture, painting, music. Many books on art, and many pictures, were passed about for examination, certain results being required. A few lessons of this kind awakened the majority of the class to a desire for more, which, of course, should lead to self-direction, the final goal of education. In music, each pupil described an opera, or symphony, or oratorio, which was followed by some selection from it on a phonograph loaned for the purpose.

Under literature much use was made of Warner's *Library of the World's Best Literature*, especially of the synopsis of books in the last volume. Each pupil was given several books to review by the aid of this or any good synopsis, and requested to secure the book to be reviewed from the library, when possible, so that the class could see it and have a sense of handling it. In this way, an introduction to the purport of many books, ranging anywhere in literature from Aristophanes' *Clouds* to Browning's *The Ring and the Book*, was easily and pleasantly gained.

Under history, as many books as possible on travel, biography, and history were examined and reported upon. Pupils were urged to outline independently the history of nations which they had not studied in school, to read much biography, to direct their own

mental lives, and realize for themselves the pure delights of scholarship, freed from the bane of examinations, and the paralysis of too much direction.

No pupil was allowed to review a book, describe a picture, or give a recitation on any topic which was familiar to him thru some other avenue. At frequent intervals alphabetical lists of allusions met with in passing were made. Such lists revealed how lacking pupils are in general information outside of a definite course studied. Some of those who had taken little science were unfamiliar with such names as Copernicus and Darwin. One boy had never heard of the Parthenon or Phidias. A number were not familiar with important legends and mythological allusions; prominent painters and musicians were surprisingly unfamiliar to many. The skeleton outline served to reveal at least the greatest names, and an appeal to the pupil's pride and ambition awakened in some an interest strong enough for self-direction. In schools where elective courses prevail, some such unifying plan as this seems almost necessary, unless pupils are to be graduated ignorant of common allusions and unprepared to enjoy much of the best in general reading.

Very little detail was required thruout the entire course, aside from the memorized skeleton. The aim of the course was primarily suggestive, and was not intended as a drill course for definite results. Present-day study of psychology is revealing the fact that suggestion often awakens more response, and creates more power, than direction. Are we not, then, neglecting the laws of the mind if we do not find some place for suggestive courses in our educational work? The great leavening power of concerts, lectures, sermons, comes from inspiration, not from detailed study. We all know in our own lives that the gleam which guided us was a spark from some moment of insight, not a spark from the friction of grinding. Inspiration precedes, details follow; inspiration quickens, details strengthen; inspiration is the master-spirit, details the servant to carry out the master's bidding; we need both, even as we need body and soul, and that education is the broadest which takes account of both. What the children's story hour has proved to be to the young child in opening up delightful reading of cultural value, a course of this kind could be made to mean to children of high-school age. What the handling of many books means to a librarian, a course of this kind, in a relative degree, could be made to mean to our high-school pupils. But after all is done, do not let us forget that He who has most deeply influenced the world, did not place a very strong emphasis upon the printed word, but proved that it is the spiritual word made flesh which gives life.

DEPARTMENT OF SPECIAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—JOHN W. JONES, superintendent, Ohio State School for the Deaf....Columbus, Ohio
Vice-President—M. P. E. GROSZMANN, educational director, National Association for the Study and Education of Exceptional Children .....Plainfield, N.J.
Secretary—CARRIE B. LEVY, supervisor of classes for the blind .....Milwaukee, Wis.

FIRST SESSION—TUESDAY AFTERNOON, JULY 9, 1912

The first meeting of the Department of Special Education was called to order in the Ballroom of the Blackstone Hotel, by Frank G. Bruner, assistant director, Department of Child Study and Pedagogic Investigation, public schools, Chicago, Ill.

In the absence of the secretary, Miss Frankie Warburton was appointed secretary *pro tempore*.

The meeting was opened with an address by E. J. Emerick, superintendent of Institution School for the Feeble-Minded, Columbus, Ohio, on "The Segregation of the Defective Classes."

A paper on "The Training of the Feeble-Minded Deaf, Based upon Impressions Gained Abroad," was presented by Frances Wettstein, principal of School for the Deaf, Milwaukee, Wis.

A general discussion regarding the institutions and the day schools followed.

Herman Charles Henderson, teacher of psychology and pedagogy, State Normal School, Milwaukee, Wis., presented a paper on "The Training of Native Impulses."

The general discussion which followed this paper was led by Frank G. Bruner, of Chicago, Ill.

The meeting then adjourned.

FRANKIE WARBURTON, *Secretary pro tempore*

SECOND SESSION, ROUND TABLE—WEDNESDAY FORENOON, JULY 10, 1912

The department met in round-table conference at 9:00 A.M. and was called to order by Effie Johnston, chairman.

J. A. Shawan, superintendent of schools, Columbus, Ohio, presented the "Report of Committee on the Prevention of Blindness and Conservation of Vision."

The discussion on this paper was opened by D. P. MacMillan, director of the Department of Child Study, Chicago, Ill.

A motion was made that the report be accepted and the committee dismissed with an expression of thanks and appreciation for their splendid efforts.

A living exhibition of the methods of instructing deaf children of the Chicago Oral School for the Deaf was in charge of Annah Taylor and Ruchiel Merrielees.

The meeting then adjourned.

THIRD SESSION—THURSDAY AFTERNOON, JULY 11, 1912

The meeting was called to order at 2:30 P.M. by Edward M. Van Cleve, superintendent of the Ohio State School for the Blind, Columbus, Ohio.

A paper on "The Possibilities and Limitations of the Deaf Mind," by Elmer W. Walker, superintendent of State School for the Deaf, Delavan, Wis., was read.

A discussion opened by Grace C. Strachan, district superintendent of city schools, Brooklyn, N.Y., followed.

The second paper of the session, "Some Features of the Education of the Blind in Public Schools," was then read by John B. Curtis, superintendent of Day School for the Blind, Chicago, Ill.

Some of the work of the blind pupils of the public schools of Chicago was shown.

M. P. E. Groszmann, who had been appointed chairman of a committee in 1911 to prepare a petition in the name of the Department of Special Education to the Bureau of Education, asking that it collect data relative to the legal status and provision for atypical children thruout the United States. was not present to report. It was moved and carried that this committee be continued for another year and, at least, make a preliminary report at the meeting in 1913.

The Committee on Nominations reported as follows:

For *President*—Carrie B. Levy, supervisor of classes for the blind, Milwaukee, Wis.
For *Vice-President*—Harris Taylor, principal, Institution for the Improved Instruction of Deaf Mutes, New York, N.Y.
For *Secretary*—M. P. E. Groszmann, educational director, National Association for the Study and Education of Exceptional Children, Plainfield, N.J.

This report was adopted.

A motion was passed to the effect that the National Bureau of Education be requested to publish for distribution the report of the Committee on Prevention of Blindness and Conservation of Vision.

The meeting then adjourned.

CARRIE B. LEVY, *Secretary*

PAPERS AND DISCUSSIONS

THE SEGREGATION OF THE DEFECTIVE CLASSES

E. J. EMERICK, SUPERINTENDENT OF INSTITUTION SCHOOL FOR THE FEEBLE-MINDED, COLUMBUS, OHIO

The subject of my talk today is a plea for more thoro segregation of the defective class. We, as superintendents of institutions for feeble-minded, feel it our duty to the public to help throw an informing light upon this subject, and in order to accomplish much, we must have the hearty co-operation of the professors in our universities and the instructors in our public schools. They should teach their pupils the danger of marrying into families where there is a history of insanity, epilepsy, or feeble-mindedness, even tho the contracting parties themselves are apparently normal, as "every child has a right to be well born." There are many of these families that should become extinct. It is a sad fact that the defective class seems to be gradually on the increase, and it is time for us to call a halt. We have no exact data as to the number of defectives in the United States but I think that a conservative estimate for Ohio would place it as high, at least, as 10,000. Professor Johnstone of Vineland tells me that he is positive that there are 6,000 in the little state of New Jersey. I do not think there are any more in proportion than in other states of the Union. If we could segregate all of the defective class, it would, to a great extent, depopulate

our state prisons, reformatories, workhouses, almshouses, and even our insane asylums. Frank Moore, superintendent of the New Jersey reformatory, examined the inmates of that institution by the Binet-Simon test, and, as a result, found that 45 per cent were mentally subnormal. This, however, may seem a little high, but if we place it even at 25 per cent, which would be a very conservative estimate, if that 25 per cent could be segregated during their natural lives, instead of being sent to our reformatories for short terms and then turned loose upon the public to commit other crimes, it would be not only a great saving financially, but also a saving to society and a betterment to humanity. They comprise the class that are sent to our reformatories and other penal institutions, that cannot be reformed. What is the use of sending the defective delinquents (or moral imbeciles, as some have called them) to our industrial schools, then on to our reformatories, and finally, numerous terms to the penitentiary? They constitute the majority of our habitual criminals.

The general public has already been educated to the belief that it is a good thing to segregate the idiot or the distinct imbecile, but they have not, as yet, been quite so fully convinced as to the proper treatment of this brighter and more dangerous class, the defective delinquent. From a financial standpoint, segregation of the defective delinquent would be great economy, to say nothing about the more salient feature, that of stopping them from producing their kind. If we could segregate these defectives when they are young and keep them confined during their natural lives, it would obviate the expense of having them committed repeatedly to our penitentiaries when they grow older. Under our present plan they are sent to our penal institutions for a short term after committing some crime, allowed to go out again, scatter their progeny, and commit other crimes and depredations, only to be recommitted time after time.

The first object in establishing institutions for the feeble-minded was to take these feeble-minded children and educate them in hopes of making them useful citizens and redeem them to society. This, however, has long ago been abandoned and we realize today that if we take these children into our institution, brighten them up as best we can, and turn them loose upon the public, it has not only been a waste of time, money, and energy, but we have done the world an irreparable injury.

The education and training they receive in our institutions conceals their defects to a certain extent, enabling them to marry more easily, often into innocent families, and, as a result, we get back several for one, which is often true even if they never marry. Many of the states have today institutions for the care and training of the mental defectives. They all should have them and the larger states should have several. There should be two kinds of these institutions in every state. If we cannot have separate institutions we should have separate departments, one for the care and training (I might say for want of a better term) of the harmless or

inoffensive feeble-minded, and those for the care and training of the defective delinquent. The latter type have more criminal tendencies and are a disturbing element among the others. They should be kept by themselves. Some may say, "Why, it is a pity to confine these children in an institution all their lives"; but that is where they are greatly mistaken, as for instance, in Ohio, I can say to you that we have a community of over 1,600 of the happiest children in the state in our institution. They are much happier in the institution, where they are protected and kept out of trouble, than they would be in the outside world, where they are subject to the scoffs and jeers of the public.

As to the training of the mental defectives, everything should tend toward their happiness in the institution, which is their home. It should not be a place of detention or anything in the line of a penal institution, but an institution for education and training. Everyone is happier by having something to do, and if we can keep these children busy, they are happy. I believe that spending much time in the ordinary grade work with the mental defective is more or less futile, but there can be much done with industrial and manual training, as well as music.

These children lack the power of concentration. They are rather apathetic in their interest in books, but they take quite readily to the industrial branches. These dull minds can be reached more easily thru their hands than any other channel. For instance, if you will go with me for a moment to our school department, I will take you to a room where you will find a lot of little boys as happy and busy as they can be, weaving rugs, making hammocks, laundry bags, doormats, cane-seating chairs, or learning to make shoes; then we will go to another room where you will see some happy, jolly little girls making reed and raffia baskets; and if you will go to another we will find boys busy at the sloyd and carpenter work; on to another and you will see a group of happy girls learning the mysteries of domestic science. I might go still farther but I have only mentioned these things to illustrate our ideas as to the education of the defective. Of course we spend a considerable time with music and are very proud of our orchestra and we make much of gymnastics. They are taught how to walk, how to stand, different dances, etc. In fact we try to develop the different muscles of the body, and by training these muscles it is wonderful sometimes how it seems to brighten the intellect. It seems so useless to waste so much time trying to teach them something they can never do when there are so many things they can accomplish which are conducive to their happiness and make them nearer self-sustaining.

I have here a few charts that I want to show you, illustrating the inevitable results of marriage in families where there is a history of mental defectives, or in other words, bad blood, and to emphasize the necessity of segregating the defective child, as it has been a pretty well demonstrated fact that from 60 to 75 per cent of mental defectives are due to heredity. Some put it even higher than this.

SYMBOLS

Square indicates male.
Circle indicates female.
Plain squares and circles indicate normal.
Small black circles indicate miscarriages.
A capital letter indicates disease, habit, or condition as follows:

A., alcoholic.
C., criminal.
T., or T.B.C., tuberculosis.
E., epileptic
F., feeble-minded } White letters on black circles or squares.
I., insane
D. Inf., died in infancy.
Sex. P., sexual pervert.
Prost., prostitute.
Morph., morphine habit.
Sy., syphilis.
Ind. school, industrial.
Broken lines indicate, illegitimacy.
↑ shows child in Institution for feeble-minded.
Hydro., hydrocephalic.
Pen., penitentiary.

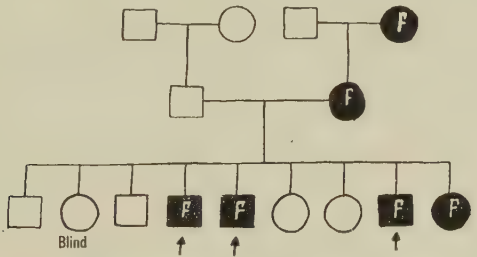

CHART I.—Shows the effect of feeble-mindedness in the mother, when the father's family is good, altho they are known to be a shiftless, easy-going sort of people.

The result of this man's marriage with a feeble-minded woman is four feeble-minded children, one blind a subject of charity, and four normal.

This shows a clear case of feeble-mindedness of three generations, transmitted thru the mother.

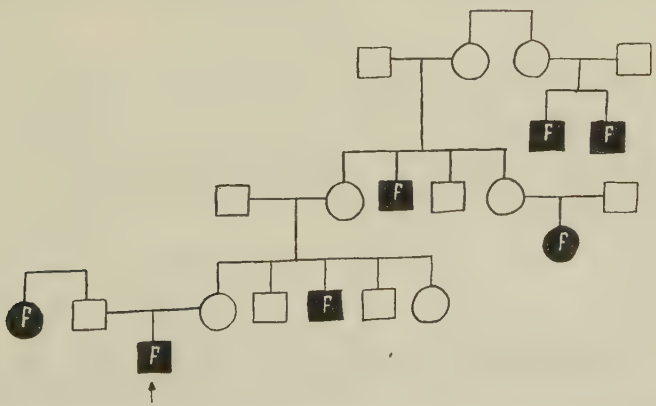

CHART II.—While the parents and maternal grandparents and great grandparents are themselves normal, we have evidence of a neurotic taint in the family.

This shows itself on the maternal side by a feeble-minded uncle and great uncle, and one feeble-minded second cousin, and two feeble-minded third cousins.

On the paternal side there is a feeble-minded aunt.

This illustrates the danger of marrying into a family where there is a morbid heredity, altho the parentage, on both sides, as far back as we can trace, be normal.

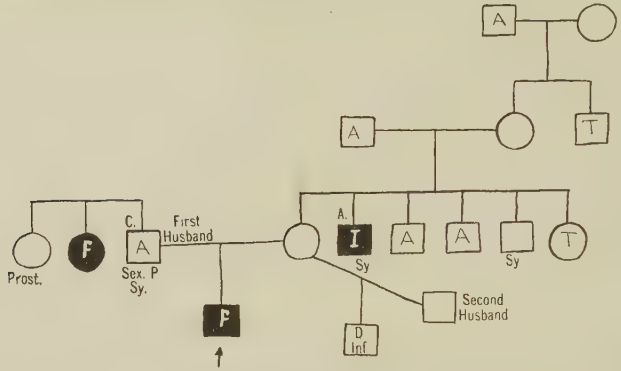

CHART III.—Shows a combination of almost every form of morbid heredity; namely, insanity, feeble-mindedness, alcoholism, tuberculosis, syphilis, sexual perversion, prostitution.

Another interesting factor is that alcoholism runs thru every generation. The maternal great grandfather and grandfather were alcoholics, and the maternal great uncle tubercular.

There were three maternal uncles alcoholic, one of whom was insane, due to syphilis. Also another maternal uncle who had syphilis, and one maternal aunt, who was tubercular.

All thru the father's family immorality exists, the father being alcoholic, syphilitic, and a sexual pervert, as well as a criminal. He has one sister a prostitute, and one sister feeble-minded.

The boy in our institution was the only child from this union.

The mother has married a second time, and has had one child, which died in infancy, from inanition.

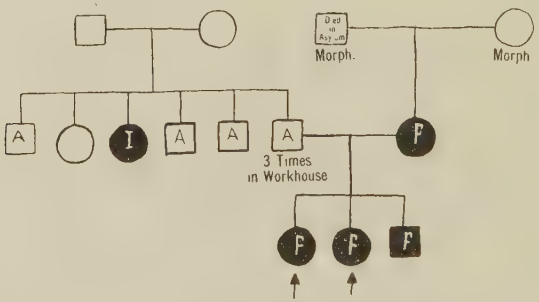

CHART IV.—Shows a combination of feeble-mindedness, insanity, alcoholism, and the drug habit.

The result of the marriage of this feeble-minded woman with an alcoholic and shiftless man, who has served three terms in the workhouse, is three feeble-minded children, two of them now in our institution, the third being too young for admission.

The maternal grandparents were addicted to the morphine habit, and while the maternal grandfather was not violently insane, yet he was sufficiently unbalanced to be committed to the asylum, and died there.

The paternal grandparents were supposed to be normal, altho they had four sons who are chronic alcoholics, one daughter insane, and one normal.

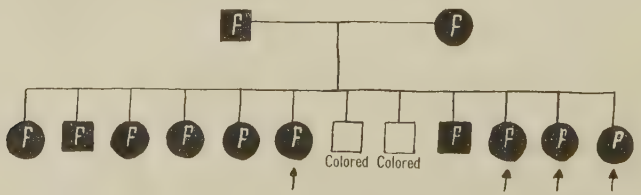

CHART V.—Shows the offspring of a union in which both parents were feeble-minded.

Twelve children were born, ten of whom are feeble-minded, the other two, who are normal, are undoubtedly illegitimate, as both parents are white, and these two children colored.

The chart is so drawn because we have no history of the illegitimacy, which, were it not for the color, would be unsuspected.

This chart clearly shows how the impossible event of normal offspring of feeble-minded parents is often apparently shown.

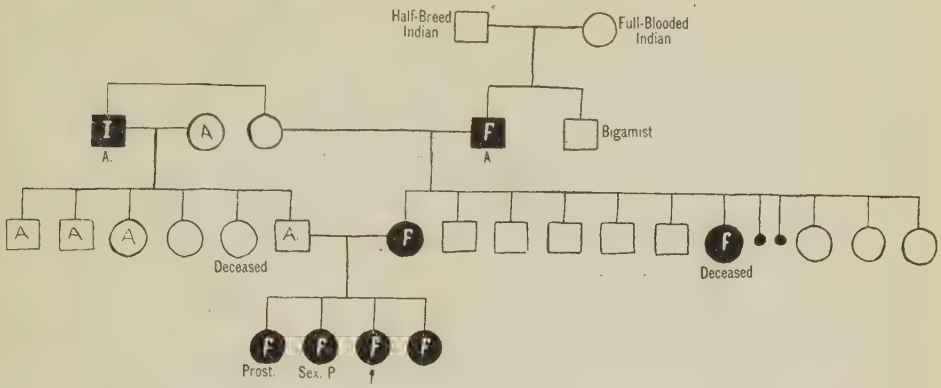

CHART VI.—Shows the effects of intermarriage where morbid heredity exists.

An interesting factor of the morbid heredity is the combination of alcoholism thru the paternal side, with feeble-mindedness thru the maternal.

The parents of the child in our institution are first cousins, the mother being feeble-minded and the father alcoholic.

The results of this union were four feeble-minded girls, one of whom is a prostitute, and one a sexual pervert.

There is a maternal aunt who is feeble-minded, and a great uncle who was a bigamist. The maternal grandfather was feeble-minded and alcoholic. The maternal great grandfather was a half-breed Indian and the great grandmother was a full-blooded Indian.

There are two paternal uncles and one paternal aunt who are alcoholics. The paternal grandmother was alcoholic, and the paternal grandfather insane and alcoholic.

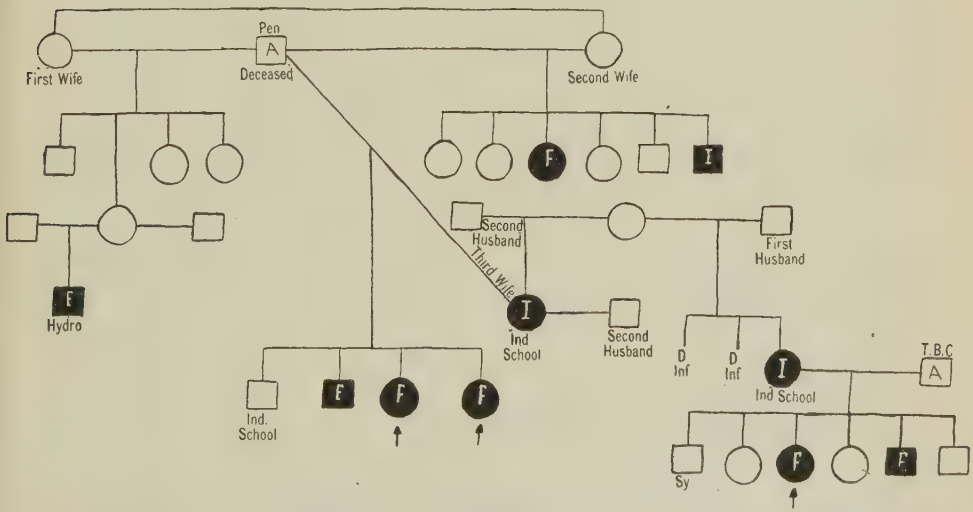

CHART VII.—Shows the descendants of an alcoholic man who served a term in the penitentiary, and who was married three times. His first and second wives were sisters, both normal. By his first wife he had four children, all normal; but one daughter who married twice had an epileptic, hydrocephalic son by her first husband. By his second wife he had six children, four normal, one feeble-minded, and one insane. For his third wife he married a woman who was raised in an industrial school, and who afterward became insane, being in the asylum three different times. The result of this marriage was two feeble-minded girls who are in our institution, one boy who is a patient in the Ohio Hospital for Epileptics, and one boy in the industrial school.

The man has died, and the woman has married a second time.

The third wife has a half-sister who is insane. She was also raised in the industrial school. This woman married a tubercular and alcoholic man, and to them were born six children, three normals, one boy syphilitic, one boy feeble-minded, and one girl feeble-minded, who is in our institution, and who, of course, is a half-cousin to the two children shown on the chart as inmates of our institution.

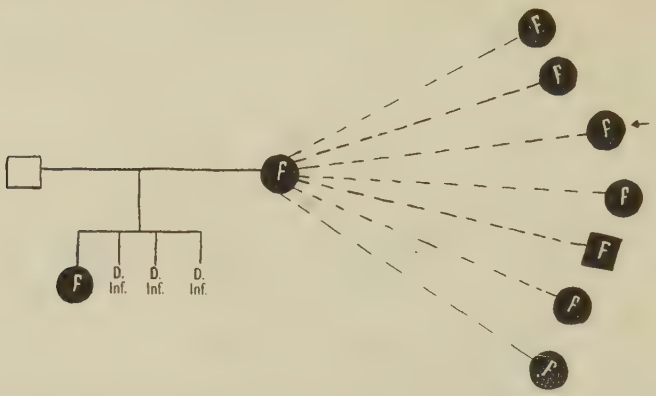

CHART VIII.—Shows the result of a feeble-minded woman being left at large, she having had seven illegitimate children, all feeble-minded.

After her marriage, she had four children, three of whom died in infancy, before their mentality could be determined. The other child, a girl, is feeble-minded.

THE TRAINING OF THE FEEBLE-MINDED DEAF, BASED UPON IMPRESSIONS GAINED ABROAD

FRANCES WETTSTEIN, PRINCIPAL OF SCHOOL FOR THE DEAF, MILWAUKEE, WIS.

If we are to gain an adequate understanding of the classification of the deaf as attempted in Great Britain and northern Europe today, we must take a glance backward and note the progress of deaf-mute education during a period of one or more centuries.

Down to the latter part of the eighteenth century attempts to educate the deaf had been sporadic only, and mainly confined to the homes of the wealthy. The first public school for the deaf was opened in France in 1760 by De L'Epee, who perfected a sign-system of his own. But this system failed of success owing to its inability to fit a deaf person for life among the hearing.

In 1778, Heinecke in Germany, and Braidwood, four years later, in Great Britain, also founded public schools for the instruction of the deaf. The method by which they taught was purely oral—speech for the deaf by means of speech—being convinced that any compromise between speech and signs would prove ineffectual.

From that time to the present, a war of methods has been carried on unceasingly. Each system, supposed to be perfect, has been tried and discarded, having been found wanting. But each failure has been followed up by some sincere attempt at improvement, with such success that, today, speech is taught in nearly all schools for the deaf, except those for the feeble-minded; and educators have arrayed before their minds ideals of a high order which they are hoping and striving to realize.

During a hundred years, the institution did as much for the deaf as any other system could have done. But with the passing of the centuries, changes vast and far-reaching have transpired. Hearing children are now kept at home and it becomes a natural question whether the deaf child should not be treated as nearly as possible as is the hearing—that he be educated at home and that the home ties be not broken.

I allow Dr. James Kerr Love, of Glasgow, to speak for the sentiment entertained by the principal educators of Great Britain relative to the day-school movement. He says:

> I shall assume that the home life of a deaf child is so important that it should be retained where possible. The institution came into vogue before the capacity of deaf mutes was properly understood and before our educational system was sufficiently organized to permit of day schools.
>
> There are many advantages in the family life for the deaf child. I do not need to point out the superiority of good home life to that of any institution. It is better for both parent and child, unless the parent or parents be deaf mutes, for the child is in an oral environment during the whole of his waking hours. The plunge from the institution into the world at the end of the school period must, to a deaf child, be like a cold bath. He is afraid his speech will be laughed at, and he has had no practice in reading the speech of even his father and mother.
>
> The day school has no such plunge in store for him. When he meets another deaf person, of course, he either signs or finger-spells, but he has already formed many hearing associations, and, at the end of his school period, he has not a strong inducement to associate chiefly with the adult deaf and dumb. Thus he is more likely to keep up his speech than the institution child.

Dr. Love has also made scientific research as to the mental and physical condition of pupils trained in institutions and day schools, and the summarized conclusions are in favor of day schools.

Dr. Kirk, a teacher of long experience in England, writes:

> The day scholars acquire self-reliance. Before I came to Leeds I was led to believe that the deaf must all be shut up in institutions. Now I think otherwise. Institutions do not train a child to live in a cottage. The average home and the day school are all right for the deaf boy and girl.

Thus modern thought and the mature and undisputed judgment of educators in Europe support the position that bright pupils should either attend day schools or be boarded in families.

CLASSIFICATION OF SCHOOLS

At the present time another classification is being recognized as advisable—one which separates those whose hearing is defective from those who are wholly deaf and dumb. In consequence of this further classification separate schools or classes for the partially deaf are being formed. Denmark, Norway, several provinces in Germany, and the city schools in London have adopted systems of classification, and other countries are likely to follow their lead.

The general classification is as follows:

A. The semi-deaf, those who hear conversational tones but one yard away, and the semi-mute, who still retain auditive impressions, should be grouped in separate departments in the public schools. Where this is impracticable, owing to a lack of numbers necessary for proper grading, they should be placed in separate classes in the schools for the deaf.

B. The mentally normal, toto-congenitally deaf, and those who lost their hearing before they acquired speech should be classed together and taught in special day schools and by the oral method.

C. The dull or backward ones should be treated in like manner as the B pupils.

D. The feeble-minded deaf: and this brings me to the most important problem that confronts the educator of the deaf today.

In Germany, all children of the A, B, and C classes are taught speech. If the mind is developed by speech and lip-reading, a theory now undisputed, the Germans reason and act logically when they give the mentally deficient as much speech as possible as a means of developing the defective mentality.

Herr Harden, speaking for the Germans, remarks:

> When we believe in oralism and apply that method to both good and poor speakers of A and B pupils . . . . I do not see why the deaf of feeble intellect should be taught otherwise than their more fortunate fellow-sufferers. Why deprive these poorest among the poor of that blessing which oral speech is recognized to be to the deaf?

The distinction between "idiotic" and "backward" children may be responsible for what seems to be a certain difference of opinion in different European countries, tho, upon further careful examination and consideration, substantial agreement may be successfully reached.

In Germany every child is taught speech, and speech that is intelligible, but the observer is struck with the absence of feeble-minded deaf, for the German pupils respond readily and their speech is easily understood. When I expressed my surprise at this feature I was told that the feeble-minded children were not admitted to the schools, but were sent to institutions for the feeble-minded in general. Thus we see that Germany has not made any special provision, as yet, for those most pitiable of human beings—the feeble-minded deaf.

Denmark places her backward and feeble-minded deaf in an institution in Copenhagen where they are all taught by manual methods. But is this quite fair to those who are merely backward? For some, at least, of these appeared bright enough to profit by oral instruction; therefore to class them with mentally deficient pupils seemed like condemning them to a life of utter isolation—dragging them down, rather than lifting them up.

Those above the average, the average, and the dull ones should all be admitted to the same advantages, for the time may come when even the dullest child will suddenly wake up as from profound slumber and start forth to work up toward the "average"; but, confined in an institution with the feeble-minded only for his associates, he is lost.

In London, I found that which appealed to me as the most effectual system of disposing of this difficult problem. All A, B, and C pupils go

to day schools and are taught by the oral method. The feeble-minded are placed in one residential school; but, before a child is entered there, he must have attended an oral school for at least two years, and he can be transferred to an institution only upon the unanimous recommendations of the teacher, the principal, and the attending physician. Should he, at any time, show sufficient improvement as to intelligence, he can be returned to the day school.

TREATMENT AND TRAINING

What are the treatment and training that ought to be given at such a residential school? To this question I have formulated an answer based on my own observation made not only in the schools for the deaf, but in different schools for cripples, orphans, and backward children.

I. MENTAL DEVELOPMENT

The intelligence of the child has to be reached and awakened, and how is this to be done? Speech, at any rate, should always be employed by the teacher, for, unconsciously perhaps, she will be more expressive in her facial movements when speaking than when merely spelling. Besides, some pupils may have a degree of latent hearing which needs only development of mind to awaken it to responsiveness, and the natural gestures which accompany speech, being the most simple and primitive of all means of communication, must needs be a powerful element in the mental development of the child. Signs and the manual alphabet may be used wherever advisable. In each case a thoro study of the individual child should be made, and that method which appeals to each one separately be employed.

II. PHYSICAL

A sound mind can live in a sound body only. Consequently the physical condition of each child should be as carefully and accurately diagnosed as possible; the diet prescribed by a physician; baths of all kinds, including electrical and sun baths, given when advisable; physical training and correction, where necessary, imparted by an expert orthopedist; in fact, the child should be afforded every opportunity of developing as healthy a body as possible.

III. INDUSTRIAL

The teacher of the feeble-minded never knows when she will be brought up against a wall thru which she cannot penetrate. She must, therefore, search for and discover what the child is capable of doing or what he may be taught to do. If, after a fair trial, she finds that her pupil cannot place a round peg into a round hole or a square one into a square hole, she must realize that he will never do anything that requires an eye for form, and she must look elsewhere for signs of development. If he has no eye for form, he may have for color, which may be turned to account by instruction in beadwork or woven designs.

Another child may be able to learn crocheting lace, or making torchon, or other desirable articles, for the market. Some may learn to do one kind of embroidery, or hemstitching. Boys might learn to make brushes, or to finish furniture, or make a certain part of furniture, or be put to work in the garden.

In short, each child should be given opportunity to learn something useful and helpful toward his own support.

PSYCHOLOGICAL ADVISER

A child of well-balanced mentality can become useful in more than one way; but one of unequal balance may be capable of doing only just one thing. It becomes, therefore, the primal duty of the teacher of the feeble-minded to find out, in any given case, what this one thing is. She needs to be resourceful and original, in order to determine what capabilities exist and how to develop them, and, for this difficult task, there ought to be placed at her disposal the assistance of an expert psychologist employed as a supervisory and advisory member of the faculty of the school.

HOME FOR ADULTS

Segregation from the general community should be observed in the case of the feeble-minded in order to prevent them propagating their kind. Therefore residential schools must give way to homes for the adults where inmates may enjoy all the privileges of companionship and helpfulness—the best substitute for a home.

COTTAGE PLAN

Wherever the institution is inevitable it should be established on the cottage plan. Not more than eight or ten should become inmates of a cottage, and each cottage should have a big brother or sister who could assume and perform the duties of the head of the family. Certain home duties might be assigned those capable of doing them. Others might be employed in a community shop in making articles of economic value which would help them to become self-supporting and thus awaken in them a sentiment of self-respect which will contribute to their happiness.

I visited a home for cripples in Christiania, Norway, where each inmate had the opportunity of working at something for which he was fitted, and I could not conceal my surprise at the manifest happiness that pervaded the whole institution. One girl without arms embroidered hardanger with her mouth only, the machine for catching the needle having been especially devised for this purpose. She was partially earning her living and, thereby, cultivating a wholesome sense of self-respect which would hardly have been possible had she been merely an object of charity, however well meaning. The men in the shops made pretty hand-carved furniture that sold at high prices, some doing only the finishing. Some were brush-makers, others wheelwrights, or bakers, or tailors. Each one was helping to support the home.

The Home for Dependent Deaf Women in Copenhagen was almost self-supporting, and I cannot see any reason why a public institution of this character, properly managed, should not be made entirely or almost self-supporting and the burden at least partially lifted from the state.

The great cry of the hour is "the individual," and an equally great fact is that a system is only as strong as its weakest link. America justifies the existence of all her universities and other palatial institutions in their power to qualify men, women, and children to live happily under any and all circumstances, but before she can claim to be an unquestioned and unsurpassed leader in education, she must also recognize the fact that each individual, however feeble, after he has been brought into this world has a right to receive care and training that will fit him to become useful in whatever line his capacity may lie. She must recognize the fact that each element in the community should be made constructive of law and order, of self-respect and mutual confidence and happiness—that it should become less and less possible or necessary to fill her prisons with criminals and her almshouses with paupers, who, by proper and well-balanced care and training, might be made to lead useful and happy lives in a community home, thereby preventing them from becoming a menace to themselves and to society at large.

THE TRAINING OF NATIVE IMPULSES

HERMAN CHARLES HENDERSON, TEACHER OF PSYCHOLOGY AND PEDAGOGY, STATE NORMAL SCHOOL, MILWAUKEE, WIS.

It is simple truth and no paradox to say that we can educate a child only so far as he will let us. The limitations as well as the possibilities of education are set by the child's own nature. In the work with defective children there has been an inclination to put the emphasis upon the limitations of that nature and to minimize its possibilities. In seeing the particular points of difference existing between the defective and the normal child, we have been inclined to ignore the many points of likeness. In the excellent work that is being done today in the education of defective children, it is a pleasure to note the effort to treat them as if they were normal children possessing the common characteristics of childhood. It shall be my object to call attention to some of these common features, and to indicate their relation to the work of education.

Various figures of speech have been current at different times to denote the facts of child nature. Among those that have had their day are Locke's sheet of white paper, the plastic clay that can be molded at will, the empty vessel that the teacher out of her abundant storehouse is to fill. All of these conceptions had behind them the erroneous assumption of passivity of attitude on the part of children and the absence of any dynamic force working from within. Education was thus largely a matter of external

imposition, and conformity the all-inclusive task of childhood. The newer conception, or that of the developing organism, with active, propulsive tendencies seeking for expression, puts the emphasis upon the child's own nature and gladly accepts its assistance in the work of education. It is the possession of a wealth of native tendencies, the inheritance of long generations, that makes childhood akin the world over. It is these that give us avenues of approach to child life even if the senses should be impaired or the mental life be defective. In them, in fact, is largely to be found the secret of educability.

The primary thing in life, as we have been so often told, is movement in response to stimuli. The whole life-process may be described in terms of reaction, stimulus followed by response, response by a new stimulus, this by a new or modified response, and so on. Tendencies to action, whether definite as in the case of the relatively fixed instincts of animals, or indefinite as in the modifiable instincts or impulses of children, require appropriate stimuli to call them forth, hence to a large extent we have it in our power to say what shall be done with them. We may repress them, we may ignore them, or we may stimulate and guide them. It is a trite saying but true, that the bad in this world is in most cases but a perversion of the good. The native impulses of children do not always manifest themselves in a lovely form, but under wise direction there probably is no one impulse that could not be turned to good account in the child's moral and mental development.

If rightly viewed, the native impulses of children constitute our chief educational stock in trade, and education itself may be regarded as nothing more than the direction of these impulses toward ends that are worth while by means of appropriate material. The training of children's impulses leads to the formation of useful habits, to the acquisition of dynamic knowledge, and to the gaining of right ideals of conduct. If this is true of the normal child, it applies with equal, if not with greater force, to the education of children physically or mentally defective.

With these impulses are associated the interests of childhood which we are learning to turn to such good account in the educative process. We are realizing that learning on the part of the child is not a mere matter of intellectual comprehension, but that it implies an attitude of mind and a certain warmth of feeling toward that which is being apprehended. In other words, we must establish lines of contact between the material we would teach and the child's own interests. As we have been frequently reminded, there is all the difference in the world between educating a child in accordance with his nature and attempting to educate him in opposition to it.

Let us now consider a few of the many important impulses in child life that may be put to educational advantage. I shall mention first the one that is most commonly appealed to, whether in normal children or in defec-

tives—the impulse to communicate with others. This impulse, manifesting itself at first thru inarticulate cries, signs, and gestures, becomes the basis of all language whether produced orally or by the use of written or manual signs. Unfortunately language exercises are often conducted without any specific reference to the communicative impulse which should furnish the motive. The results are thus highly formal and lacking in that life and freedom of expression that comes when the child has really something he wants to say.

Richness of content of experience on the one hand, and on the other the presence of one or more personalities interested in learning of that experience are fundamental in securing free exercise of the communicative impulse. I quote from Miss Sullivan in her interesting account of the education of Helen Keller:

> Language grows out of life, out of its needs and experiences. Good work in language presupposes and depends on a real knowledge of things. I never taught language for the purpose of teaching it, but invariably used language as a medium for the communication of thought; thus the learning of language was coincident with the acquisition of knowledge. In order to use language intelligently, one must have something to talk about, and having something to talk about is the result of having had experiences; no amount of language training will enable our little children to use language with ease and fluency unless they have something clearly in their minds which they wish to communicate, or unless we succeed in awakening in them a desire to know what is in the minds of others.

Of written language Miss Sullivan adds:

> In order to write, one must have something to write about, and having something to write about requires some mental preparation. The memory must be stored with ideas and the mind must be enriched with knowledge, before writing becomes a natural and pleasurable effort. Too often, I think, children are required to write before they have anything to say. Teach them to think and read and talk without self-repression, and they will write because they cannot help it.

I quote at such length because in my judgment these sentences contain the essence of a sound pedagogy of language teaching.

When it comes to the actual learning of language forms, whether oral or written, the imitative impulse comes to be the chief agency to rely on. In the case of the deaf child the stimulus to imitation comes thru the sight of the moving lips and the feel of the teacher's vocal organs rather than thru the ear as in the case of the blind or normal child. Imitation develops into a voluntary attempt to do things in the way one is shown. With desire kindled thru the impulse to communicate with his fellows, there seems to be practically no limit to the efforts a child will put forth to get the right movements of lips and other vocal organs. The blind but hearing child imitates spontaneously the speech of his elders and companions; the employment of voluntary imitation comes in as he attempts to master the characters used in writing.

The most obvious of all the native impulses of childhood, at least in the early years, is the impulse to play. We are realizing as never before how important a factor it is in the natural education of children. From the

children's own free plays and the simple plays and games of the kindergarten, to the elaborate group games of later childhood and youth, there is practically no limit to its educational possibilities. Fortunately, the play impulse is strong in defective as in normal children, tho from the lack of visual or auditory stimuli the former are apt to be more inactive and to play less than normal children. Teachers of the deaf and blind should themselves know how to play so as to be able to suggest plays and games to the children and to participate in their play activities. While nothing can take the place of free plays, the play spirit can be introduced into much of the work of the school, particularly with the younger children. The finding of familiar words on the blackboard or in the new reading-lesson, the carrying-out of the actions involved in verbs such as jump, run, lie down, etc., the forming of number combinations and the performance of simple arithmetical operations as games, the holding of spelling and geography contests are various ways of utilizing the play impulse. I should like especially to urge the introduction of plays involving imagination and those in which impersonation and dramatization play a leading part. The reading and language work, and the history and geography as well, give abundant opportunities for dramatization. In dramatization, the child's ideas become clarified and his imagination is set free. Besides the direct benefit received by the children, the teacher is afforded an opportunity to observe whether the children comprehend the details of the story told or read. This is of particular value in the case of deaf children.

The constructive impulse or the impulse to make things is powerful in the great majority of children. We now no longer ignore it, much less do we seek to repress it, but we are conscientiously setting ourselves to the task of directing and guiding it. This is no place for me to make any special plea for hand activities. Their value has been demonstrated. Thru ministering to the need in the child's life for the satisfaction of the constructive impulse, we have been able to discover possibilities in child life hitherto unknown. The blind, the deaf, the mentally defective can all be reached for good thru the training of this impulse. Co-ordination of muscles, of hand and eye in the case of the seeing child, the stimulation of imagination and growth in the ability to think thru a problem of means and ends are some of the advantages secured by the various forms of handwork and manual training. Nor in this connection must the vocational aspect of constructive activities be forgotten. The problem of earning one's living becomes even more acute in the case of defective children, who, whether in private institutions or in connection with our public schools, undoubtedly should be given an opportunity to select some occupation requiring skill of hand, and be given a chance to become prepared for that occupation.

Singing as an oral form of expression has its limitations in the education of the deaf, but the rhythmic impulse with which it is related is one that

should receive the most careful attention. As a means of securing muscular control as well as grace of carriage, rhythmic exercises are invaluable. Marching, calisthenics, dancing, club-swinging give a wholesome outlet to the rhythmic instinct. How this may be employed in connection with the piano in producing flexibility of tone among the deaf is a matter, I presume, of common knowledge.

No consideration of the educational possibilities of children's natural impulses should omit reference to the place curiosity holds in a child's life. It is *par excellence* the means by which the child comes to know the meaning of the world around him. Curiosity is the natural stimulus to the learning process. Of Laura Bridgman at the age of twelve, Dr. Howe remarks:

> Her curiosity is insatiable and by the cheerful toil and patient labor with which she gleans her scanty harvest of knowledge, she reproves those who, having eyes see not, and having ears hear not.

Of Helen Keller at the age of ten Miss Sullivan writes:

> She almost overwhelmed me with inquiries which were the natural outgrowth of her quickened intelligence.

As evidence of her active, inquiring mind she quotes as some of the questions asked:

> "Who made the earth and the seas and everything?" "What makes the sun hot?" "Why does not the earth fall, it is so very large and heavy?"

Are such questions to be lightly set aside, or shall they not be taken as starting-points for the comprehension of some of the great truths of life and nature? When we realize the important part that curiosity or the impulse to inquire has played in the development of knowledge, we should carefully guard against doing anything that would stifle this spirit of inquiry. On the other hand, knowing that the presence of curiosity is synonymous with mental alertness and is one sure guaranty for the securing of interest, we should see to it that it is stimulated and then guided in directions that will be worth while. In this connection I should like to specially recommend Professor Dewey's second lecture in *The School and Society*, for an illuminating discussion of the distinction between "indulging" an impulse by merely stimulating it on its own level and "satisfying" that impulse by directing it so as to secure increased power and wider experience.

Instincts and impulses are signs of future possibilities; they represent the dynamic at our disposal in the educative process; it is for us as teachers thru our wider knowledge and deeper insight to indicate the direction they are to take so that richness of experience and efficiency in action may be the outcome. And in the case of children handicapped by sense defects to whom are closed the usual gateways to knowledge, to beauty, and to love, it seems doubly important that we make much of the inner tendencies of their nature and see in their training not only the guaranty of a fuller intellectual life but of a happier and richer emotional life as well.

REPORT OF COMMITTEE ON THE PREVENTION OF BLINDNESS AND CONSERVATION OF VISION

J. A. SHAWAN, SUPERINTENDENT OF SCHOOLS, COLUMBUS, OHIO

When this committee began its work, it soon became apparent that the field was a much larger one than at first contemplated. Assuming that its investigations should be confined to school conditions and school activities, it has endeavored to limit its operations to such. At its first meeting, an appeal came from the representative of a body of sewing girls in New York City who stated that these girls were compelled to work in rooms with light insufficient for them to see how to thread their needles. A standard for such conditions was asked for; this, together with the kind and quality of light required in mechanical and industrial arts, and its effect on vision, was at that time considered.

The possibility of reducing the dangers to vision from accidents and the liability of corporations in such cases are a fair subject for investigation and study. Such work, except as it relates to school children, however interesting and promising, is clearly outside of the province of this committee. The work of the committee has contributed to the founding of the American Association for the Conservation of Vision, which has received substantial support and recognition from the Russell Sage Foundation. This association will endeavor to study the problems of vision from every point of view and its findings and suggestions cannot be other than beneficial to thousands who need both knowledge and protection. If the committee has done nothing else, this one accomplishment would amply justify its existence.

The committee in its investigations has found:

1. That there are in the United States one hundred thousand people who are blind.
2. That in one-third of these cases, blindness might have been averted had right protective measures been taken.
3. That one-quarter of the children in the schools for the blind have lost their sight needlessly.
4. That of all conservation movements, the one whose aim is the preservation of eyesight is the most appealing and among the most important.
5. That it is one of the movements in which the largest results may be obtained with the least expenditure of effort and money.

In the face of such facts, it is clear that something should be done both to prevent blindness and to conserve vision, not only where it is already limited, but also where it is normal and liable to become affected. The first step was to determine exact conditions by questionnaires and otherwise. The lines of inquiry so far have covered the following phases of the subject:

1. The amount of light admitted into the schoolroom and the direction from which it comes.
2. The effect of a shiny surface, whether the blackboard or printed page, and the possibility of getting rid of it.

3. The size and clearness of type and the tint of the paper used.

4. The use to which the eyes are put and the reduction in the amount so as to prevent eyestrain.

5. The prevention of progressive near-sight by limiting the use of the eyes for close work.

6. The correction of focal defects in so far as school authorities can act or suggest.

1. In considering the amount of light admitted into the schoolroom and the direction from which it comes, a careful investigation was made thru the department at Washington showing the laws and ruling of state departments on the subject, and by correspondence with nearly 3,000 superintendents, principals, and teachers. The great bulk of this correspondence has been preserved for the use of the committee appointed by the National Council of Education on "Problems of Health in the Schools." Briefly stated:

A study of state laws and rulings of state departments covering the amount of light admitted into the schoolroom shows:

(1) That in reporting the ratio between the window and the floor space, one state requires one-seventh; four, one-sixth; nine, one-fifth; two, one-fourth. A few would allow a lower ratio of light area if strengthened by proper reflecting surfaces.

(2) That in placing the windows, five states allow them on the left and rear; nine emphasize the left but allow supplemental light from the rear, preferably high half-windows; Indiana admits from the left side only when the pupils are seated for study; when possible, Illinois would have light from the north side only. The eyes of both teacher and pupil should be protected. It follows, and is rapidly becoming universal in school architecture, that light should be admitted from the left only and from as near the ceiling as possible.

The passage of laws, the rulings of state departments of education, the action of health departments, etc., are moving forward so rapidly that data gathered last year will be obsolete next. This is certainly most gratifying.

2. The consideration of the effect of a shiny or glaring surface on vision, whether it be the blackboard or printed page, naturally comes under the physiology and pathology of vision, which is in itself a large question and should be treated in full if at all. But the committee wishes to report the following suggestions submitted to the Board of Education of New York by the principals of public schools of that city, which show the practical trend of thought along this line and which are the result of a careful study of this phase of the question:

(1) That hereafter no calendered or coated paper be permitted in the textbooks given to children, as the dazzle of such paper is injurious to their eyes.

(2) That half-tone pictures be not permitted in schoolbooks but that simple, easily seen outline pictures be substituted for them.

(3) That the length of line in schoolbooks be from a minimum of $2\frac{1}{4}$ inches to a maximum of 3 inches.

(4) That the space between the lines be not less than 3 mm.

(5) That in reading, the children hold their books at an angle of approximately 45° and that in oral reading they be required to look up frequently.

(6) That after a lesson demanding close work, the children be asked to look up at the ceiling or out of the windows to change the focus of their eyes and rest the muscles of accommodation.

(7) That classrooms be equipped with loose chairs of different sizes so that the children may sit in seats that fit them, placed where they can see best.

(8) That in the first two years of school all writing be upon blackboards instead of upon paper.

(9) That all rooms in which artificial light is burned continually be closed.

(10) That no part-time classes be permitted to occupy any room in which the light is not entirely satisfactory.

(11) That electric bulbs used in lighting classrooms be made of frosted glass, and that clusters of such bulbs be provided with pale amber shades to screen the pupils' eyes from the direct rays of light.

(Number 11 was adopted as a result of a tour of the Evening High School and inspection of the lighting system used there.)

3. The size, clearness, and simplicity of type are very important. The lack of clearness of outline which comes from overuse of plates is a condition for which there should be a remedy. This is particularly true of popular novels which are run off edition after edition without change of plates, and the eyes of our young people are often ruined thereby. There should be a limit to the use of plates.

Great progress has been made in the manufacture of textbooks due in part at least to wholesome competition. However, in talking with schoolbook publishers, there is a willingness to co-operate in the matter of paper, type, and spacing. In a recent adoption in the city of Chicago we are informed that the kind of paper, the size of type, the number of copies to be run off without change of plates, and the spacing were specified, and the contract for a large edition on those conditions let. There is no reason why smaller cities should not duplicate these requirements. But this will hardly be necessary, for all publishers are doing away with the glazed surface and using a clear, soft, white page instead.

4. The amount of use to which the eyes are put and its possible reduction is important. The eye is a willing servant. It responds to the call for service long after it has passed the point of fatigue but in doing so makes heavy drains on the nervous system, often with serious after-results. Under the care of the eyes, statistics were gathered from many sources, relative to the amount of work required in the schools. These were reported quite fully in the last volume of the *Proceedings of the National Education Association*, pp. 1066–67, and need not be repeated at this time, tho much has been added since. Three conclusions were reached:

(1) That according to accepted standards the number of hours requiring eye-work in school was not excessive at the respective ages except in rather extreme cases.

(2) That the amount of time given to study outside of school was, in most cases, quite insignificant.

(3) That the amount of miscellaneous reading required outside of school is not large except in a very few cases. The committee is of the opinion, however, that very many books used by school children are inferior both in contents and in quality of print. It is suggested that the child should be more carefully guided both by teacher and by parent and that the quality of paper, size of type, clearness of print, as well as the contents, be given great attention.

5. Nevertheless in studying the prevention of progressive near-sight, attention is called to the conclusions of the late Professor Dufour previously published, which have been repeatedly verified, viz.:

(1) In all schools the number of shortsighted pupils increases from class to class.
(2) The average degree of shortsightedness increases from class to class.
(3) The number of shortsighted pupils increases with the increase of school demands.

Fuchs, as translated by Duane, says:

Most cases of myopia are those of low degree which develop during youth and come to the stop after the completion of the body growth (stationary myopia). In other cases, however, the myopia attains a considerable height even in youth, and then does not remain stationary but increases steadily during life, so that finally it reaches the greatest possible degree (progressive myopia). It is mainly these causes which lead to destructive changes in the interior of the eye, and that cause myopia to appear in the light of a disease of the eye, and of a serious disease too, which in advanced age often gives rise to amblyopia or even blindness.

It has been established by many observations that acquired near-sight is found almost exclusively in those persons who are compelled to strain their eyes with near work.

Concerning this, Hirshberg of Berlin, than whom there is no higher authority, in a monograph recently published on short-sight, says:

My observations, especially in my private practice, and my carefully entered clinical records carried on for more than three decades, have given me the comforting conviction that by means of a long-continued abstention from close work the stretching process which constitutes myopia can be so far arrested (indeed, relatively speaking, it is by no means rare for it actually to be brought to a standstill) that further diminution of acuity may not occur. Heedless of all considerations of rapid advance in learning, as soon as the first indications of these important changes appear all ordinary school teaching for the next two years must be set aside or replaced by a special form of home training which should be oral in character and all copy-book writing and prolonged eye study entirely excluded.

It will be evident then that our school methods in which the same curriculum is employed for those whose eyes have begun to fail and for those whose eyes are strong must be modified. There should be special classes for those with defective eyes, or better still, the whole curriculum should be modified so as to limit the amount of eye-work which is now required from the adolescent.

In his address one year ago, the chairman of this committee, in speaking of the desirability of using the eyes less and the mind more, said:

When the wheels begin to grind, it means not only that the machine is being destroyed but that power is being lost and progress is being impeded. When, therefore, we find that in the process of educating the child his nerves give way, his eyes are used with difficulty, or his sight becomes impaired, it is in itself evidence that there is internal friction and that the highest intellectual results are not being conserved. The excessive use of

books and of note-taking, which by reason of the added visual effort required for near work is the chief cause of eyestrain and of the structural changes in the eyeball, is at the same time an obstacle to direct and logical thinking. The printed word is but a symbol of the thing or action which it represents, and it must be interpreted in terms of sense images. The groups of letters constituting the word in and of themselves are meaningless until they are so interpreted. So definitely are the seeing of the word and its interpretation dual processes that when a break occurs in the line of transmission in the brain connecting these two centers their sense of relationship is lost and the printed page carries no meaning to the otherwise intelligent brain. The action which the word or group of words represents is not immediately understood. This condition is called "aphasia," or word-blindness. Its importance in pedagogy seems to have been overlooked. It means, if it means anything, that two efforts are required to convey an idea from the printed page when but one would have been sufficient had the act itself been portrayed rather than the symbols used to represent the act. The human mind is incapable of performing two functions at the same time. While the attention is given to the written or printed word it is diverted from the thought which it is intended to convey. Hence every hour of book-study means twice the time and twice the effort that would have been needed had direct methods been employed. Apply this to the whole long, costly period of tutelage and we can realize how school life might be shortened and eyes and nerves might be saved by teaching the thing sought for itself without the intervention of the impeding symbols.

It is the act of thinking that is the essential thing. We do not see with our eyes or hear with our ears except as the brain understandingly recognizes the impressions made upon it. We use our eyes so constantly that we fail to hear much that should impress us. "Eyes have we but we see not; ears, but we hear not! Brain-building comes from thinking, and printed books are only the guideposts, not the steps, from point to point."

Even the most conservative educator must agree with the general propositions laid down in the above. The process of visualization used so freely at the present time is an attempt to fix ideas in the mind without overtaxing the eyes. The attention given to the development of the sense of touch must also serve as a relief to the other senses in conveying impressions to the brain. There is no doubt that merely looking is not seeing. It is wonderful what can be done by fixing the mind on a few things definitely stated. By a slight association between the words as given, any average seventh- or eighth-grade class will listen to a list of thirty to fifty words and repeat them in order without the omission of a single word and then reverse the order, if desired. A mental picture of a landscape may be drawn in the same way, which a class will readily reproduce orally and in many cases by a drawing. Much more can be accomplished than is now done in appealing to the brain thru the other senses than the eye, and much more will be done in the future as the value of such work is fully realized. Securing the attention is easy, if details are presented definitely, clearly, and without confusing additions. To see the plans of battle, the great general is able to visualize the entire field and direct

the movements of each column. It is not so important that he should occupy an eminence or be up in a balloon so that he can look down, as it is that he get reliable information from his aides from time to time and thus mentally see what the enemy is doing and change his plans accordingly. The real battle is being fought in his brain. Every great structure must first exist in some human brain before the details are worked out on paper or blueprints prepared. Recognizing these facts, the schools may profitably give more attention to thought than to symbol.

The correction of focal defects, in so far as school authorities can act or suggest, we shall not enlarge upon at this time. Much material has been gathered showing that the subject is being carefully considered all over the world. Medical inspection has come to be recognized as of fundamental importance and it necessarily includes the recognition and correction of visual defects.

Your committee would therefore repeat and urge upon school authorities a consideration of the conclusions of a year ago, viz.:

1. That the nation's most valuable asset is its children. All other forms of wealth are of secondary importance, because later it will be thru their efforts that all progress—material, intellectual, and moral—shall become possible.

2. That except for their minds and morals—and both depend in a larger degree than we realize upon their sight—their eyes constitute their most valuable possessions.

3. That the present methods of book-study, especially in the large proportion of cases in which uncorrected organic defects are present, not only affect the eyes themselves but retard the normal development of the brain, prolonging thereby unnecessarily the period of tutelage and lessening life's larger opportunities.

4. That there should be less close work for the eyes in book-study, note-taking, etc., that the amount of work requiring pen or pencil should be as limited as possible, and that care should be exercised in providing conditions under which the eyes shall be used with the least possible effort.

5. That in the building of new schools the placing of the windows and the seats of the children should receive special attention and that when artificial light is employed as in evening schools it should be adequate, properly placed, and properly shaded.

It is further recommended that measures be taken in all schools to determine the acuity of vision of each child—together with the conditions under which school and home work is conducted; that proper examinations of the eyes be made by competent specialists when necessary; and that glasses be provided at public expense when the parents are unable to purchase them, thereby adding to the efficiency of the child; and that provision be made for the preservation of the sight of those who cannot see adequately or comfortably, by the arrangement of special classes in which instruction shall be carried on as far as possible by other methods than the use of books. Furthermore, if in every schoolbook were printed a page giving simple instructions as to the proper care of the eyes and other hygienic subjects, its value would be immeasurable. This is done in France and gratifying results are claimed. The following is suggested

as a form that might with propriety be used and be placed on the first blank page with practically no added expense in the cost of the book. This is earnestly recommended:

TAKE CARE OF YOUR EYES

1. Always take good care of your eyes! Blindness is one of the most serious afflictions that can happen to you.

2. In reading or writing the light should come over the left shoulder and be strong enough to enable you to see easily.

3. A good lamp on the table is much better than a flickering gas light hanging from the ceiling. The light should be properly shaded so that the glare does not hurt your eyes. The pages should be kept clean so that the type may be easily read. If the margins of the eyelids are red or sore, if the lids discharge, if the use of the eyes causes them to pain or the head to ache, if the letters on the page blur or become indistinct, if the eyes are not straight, or if you cannot see distinctly, the eyes should be examined by a competent person and proper spectacles should be used if needed.

4. Roller towels should never be used; they may carry disease of the eyes from one person to another.

5. Do not play with sharp pointed sticks, nor cut with the blade of a penknife toward you. Do not try to untie knots with scissors or with other pointed instruments. Little children should not play with sharp-pointed instruments or buttonhooks; many eyes have been seriously hurt in this way.

6. Redness, with the discharge of matter, in a new-born baby is a sign of great danger to the sight. To save the child from blindness a good doctor should be called at once.

7. Injuries or inflammations of the eyes should receive care from a skillful doctor promptly. Blindness may thereby be prevented.

In presenting this report, and asking for its discharge, the committee is aware that the work has only fairly been begun. In compensation it should be said that all the materials gathered and information in process of accumulation will be turned over to the Committee on Problems of Health in the Schools appointed by the National Council of Education. Thus the work has been provided for and, no doubt, the new committee which will have the means at its disposal will continue the necessary investigations and study. The one desire of your committee is that information be furnished to those who need it thru the schools, the most effective channel, and that such legislation be secured as will protect and conserve the eye, the most important of all the sense organs. We believe that a fair start has been made in this direction and that the work will continue. It is, therefore, recommended that the present committee be discharged.

THE POSSIBILITIES AND LIMITATIONS OF THE DEAF MIND

ELMER W. WALKER, SUPERINTENDENT OF STATE SCHOOL FOR THE DEAF, DELAVAN, WIS.

It is with some apologies that I undertake to analyze even in an elementary way the mind of the deaf. The very title of this paper suggests that in some way the deaf mind differs from that of the hearing. In a certain sense this is true. In a larger sense it is not true. Human minds and

human hearts are substantially the same the world over altho the method of approach may differ. I fear too in the discussion of this topic I may wound the feelings of many of my very best friends, for I do feel intensely friendly to the deaf. We are all very sensitive over our defects. I trust all of my friends understand me well enough to know the spirit in which I discuss this subject.

Let us understand at the outset what is meant by the deaf mind. The non-professional world speaks of anyone who cannot hear as being deaf. For ordinary purposes this is accurate enough but among those who are teaching the deaf this is not sufficient. I mean by a deaf mind not only one that cannot hear but one that, at least since infancy, never has heard. Such a mind cannot think in audition impressions. It is a great handicap to pass one's years in a world of silence, but still this is not the handicap that a deaf mind carries. Serious as this is, it is not to be compared with that condition which forces one not only to pass adult years in silence but also to do one's thinking in terms lacking the audition elements. A very large proportion of the so-called deaf have heard and still carry in memory and imagination the audition impressions of hearing days. Of such this paper does not treat. I should say in passing that most of the capable deaf students in all schools and especially those who make the best oral students belong to this class. They are frequently exploited in such a way as to leave the parents of the congenital deaf child to infer that his child belongs in this same class. As a matter of professional ethics and justice the teacher of the deaf should be frank with the parents of the deaf.

This paper discusses those deaf who have never heard; to whom existence brings no sound; to whom memory recalls no audition impressions; to whom imagination presents no image containing an audition element, and for whom judgment is never based upon auditory perceptions—the deaf mind.

Of the many sense avenues to the brain three only are of value in development of the mind—feeling, seeing, and hearing. Of these, feeling is in its influence very inferior to the other two. Practically all of our mental development is brought about thru the impressions that come to us thru the eye and the ear. On the impressions so brought one's thinking for a lifetime is based. For us the hearing memory holds visual and audition impressions which in moments of darkness and silence are represented and form the basis of our thinking. For us imagination builds pictures of beauty by recombining the same impressions and in moments of darkness and silence this beauty is still ours. For us judgment sits enthroned and issues its mandates with precision and authority. For us reason moves to its correct conclusion altho light and sound be cut off. For us a fullness of knowledge comes because of a completeness of sense perception which forms the basis for knowledge and intellectual strength. For us the emotions are rich and inspiring because of what knowledge brings. For us the

will directs and impels because of these aroused emotions. For us all mental activity is rounded out and completed because of this sequence of mental acts. Reflect upon what a lack there is in that mind which not only does not hear but never has heard. One-half of the sense impressions of the day are omitted. One-half of the material which memory can recall is lacking. One-half of the substance of which imagination builds is gone. One-half of the basis for the judgments, the reasonings, the knowledge, the emotions, and the will is non-existent. The mind thus deprived of one-half of the material for its activities is proportionately inactive and cannot develop its full intellectual strength and vigor. Deprived of one-half of life's mental experiences, it is lame in mental activities.

Note the peculiar kind of impressions and mental activities that come thru and are aroused by audition impressions. The eye is mainly the factual organ. The ear is mainly the imaginative organ. It presents to us not only what is but what may be hoped for. It is the vehicle of the soul's longing. The peculiar intonations and tenseness of the human voice set the mind of the hearer roaming in channels it could never follow by simply reading the printed page. Music bears us to lofty flights of imagination. It inspires us to patriotic fervor. It lifts us upon the mountains of hope and sinks us in the valley of despair. Upon the impressions brought by the ear imagination and emotion feed. As Carpenter puts it, "It is the ear and not the eye which moves the heart." Thus the deaf mind is peculiarly lacking in imagination and emotion. Every teacher of the deaf has in his experience many instances of this deaf mind peculiarity. Some years ago a middle-sized boy entered my office and asked for a hair cut. I absent-mindedly wrote out the usual request using three words instead of two, thus, "a hair cut." The boy took the paper, but presently came back with distress written over his face and revealed in his disturbed tones. He indicated that I had made a mistake, that he wanted many hairs cut. His mind read with practical literalness my statement and he fully expected that should he take that paper to the barber he would have one hair snipped off. Very likely this would have occurred, as the barber, himself, was also deaf. They had not imagination enough to build out the uncompleted image in my phraseology. Of course, the joke was on me, not on the boy. It was my blunder, but still no hearing mind would have hesitated a moment in grasping the idea and moving directly to the proper objective. I instance this as a type of the deaf mind.

The emotions are awakened by imagination, that is, by that power that can combine a strong present sensation with the memory of some past sensation. The mind that lacks this recombination or imaginative power must necessarily, therefore, be lame in its emotional qualities. Emotion solicits the will, hence the will of the deaf mind is not pronounced in its activity. This renders the deaf mind peculiarly liable to be imposed upon. It is dependent upon the will of others. Those who deal with the deaf

continually know with how much greater readiness, after confidence is once won, the deaf will subverts itself to authority.

What I have tried to say thus far is that because of the peculiar handicap that nature has put upon it the congenital deaf mind is lacking in many of life's experiences, mental activities, and power. The case is not, however, quite so bad as here presented. Nature, here as elsewhere, has worked out beautifully her law of compensation. One sense frequently becomes quickened because of the absence of another and the eye in truth may become a substitute for the ear.

Like the human voice, facial expression may reveal something of one's inmost thought and feeling. Each betrays personalities. Rhythmical movements in a degree may do for the deaf mind what music does for the hearing. A teacher whose movements are graceful, rhythmical, and easy, and whose features are facile, is restful to the deaf pupil just as a smooth, well-modulated, and thoroly mastered voice is for the hearing. Thus thru facial expression and controlled movements the deaf mind is aroused to something of imaginative and emotional activity.

Irrespective of the manner in which the pupil has been trained, thought expression is much more difficult for the deaf than for the hearing. Statisticians tell us that the average hearing boy in his school and at his play hears 136,000 words a day. This alone affords the basis for a liberal education. The average deaf child does not see upon the lips, upon the fingers, or upon the printed page one-tenth that number. This means that in language experience a deaf man of sixty has the equivalent of a hearing child six years of age. As there is a reciprocal psychological relation between the expression of thought and thought-power, it therefore follows that those for whom thought-expression is necessarily slow do not attain quite the thought-power of others. The adult deaf, of course, may overcome this largely by becoming omnivorous readers, and those who do, develop a power of thought concentration quite equal to that possessed by the hearing.

Therefore lameness in the direction of imagination, emotion, and will has its partial compensation. Aside from these handicaps the deaf mind seems to me to be like the normal mind. Its possibilities approach the possibilities of the normal mind.

From the viewpoint of the psychologist I have endeavored to analyze some of the differences between the deaf mind and the hearing mind and from this viewpoint I am willing to concede that nature has put closer limitations upon the mind of the deaf than she has upon the hearing, but from the viewpoint of the teacher all in this paper which precedes this point is valueless. The activity of the teacher's mind, whether of the deaf or the hearing, should not be focused upon the mental limitations of his pupils. It may be true that some minds meet tremendous obstacles. It may be true that to some minds certain activities are impossible, but the

greater truth is, and the one that the teacher should always grasp, that human mind is, outside of Deity, the one omnipotent thing in existence—that it has no limitations. This truth grasped in its fullness by any teacher will put him in such an attitude of mind that he bears down for them the very obstacles which his pupils confront. Limitations of the deaf mind! These are days when there are few limitations in anything. Records are being broken everywhere. It may be technically true that around every field of human endeavor there is a line which marks the limitations in that field. I say this may be technically true but in a broader way it is not true. So promptly and completely does human power rise to broaden and widen that line of limitation that we are more true when we say that there is no limitation in the field of human endeavor.

Likewise each individual may be thought of as being surrounded by a line which limits his possibilities. Teachers are prone to think of one pupil as having wider possibilities than another. Subsequent teachers, however, have discovered, and subsequent conditions have revealed, that the child of so-called narrow limitations has pushed back the limited boundary to larger and larger dimensions until he has outstripped those considered his mental superiors. Physicians have classified subnormal minds as being capable of development only to the seven-year stage, or the ten-year stage, or the fourteen-year stage, only to find later on that in the hands of a wise teacher the stage has been crowded back to a wider range. Just as there is no limitation to the field of human endeavor in the physical world, so there is no limitation to be set upon any man's individual capacity. He broadens it beyond his own expectations by the very hope that is within him. Power of human mind is unmeasurable. We measure the power of steam, of water, of electricity, of wind, but we have no unit for the measurement of mind-power; therefore, no limit can be set to this power. Reason may say that somewhere there does exist a limit to mind development, but we cannot sense that limit because it is not yet located and because we have no unit for its measurement. We do not feel its existence as a hampering force. We can set no limit on how much we can remember; how vividly we can imagine; how deeply we can love, or how reverently we can adore. All these powers grow with their buoyant use and the individual becomes more buoyantly and hopefully powerful because of his appreciation of that growth. Even tho psychologists may prove that every mind has its limitations, the teacher has no right to base his philosophy on that psychology. The larger truth is that the possibilities of the human mind are boundless; that if limitations exist the teacher should never think of them. To the teacher the indifferent manner, the lack-luster eye, the droning tone should never suggest limitations. As a stream cannot rise higher than its source, so no teacher can carry any pupil beyond the limitations the teacher, himself, has set for that child. Therefore, establish no such limitations. Think of no child as dull or subnormal. He may be so, but the teacher

must not think him so. That habit of thought is bound to reveal itself in you and draws the child's limitations closer. His mental progress is stopped because your aspiration for him is not boundless. It is unfortunate for a pupil to feel or say, "I can't," but it is still more unfortunate for the teacher to feel or say, "You can't."

This theory of mind-limitations applies to all teachers of all classes of pupils but it applies with triple force to the teacher of defectives. This is a department of special education and we all have to deal with some form of so-called defectives. We have no right, either consciously or unconsciously, to sink to that habit of mind where we explain to ourselves or to others some poor work on the part of our pupils because they are defective. I deal with the deaf and from a psychological standpoint I may recognize, as voiced in the early part of this paper, certain limitations that Providence has put upon my pupils, but I have no right to apologize for their frailties, to excuse their weakness, or to ignore their shortcomings because of their deafness. To do so would inevitably lower the spirit of the whole school. Lowell voiced a truth when he said:

> Perhaps the longing to be so
> Helps to make the soul immortal.

The longing of the deaf child to hear helps to give hearing to his soul, but we as teachers must arouse that longing. We do it by treating the deaf as tho they were hearing children; by expecting the same things of them; by setting the same standards for them; by doing the same things with them. I decry "special books for the deaf" as misleading and pernicious. The deaf can use the same books that the hearing use and by the use of such they become more like the hearing.

So the mind of the teacher of the deaf must be loaded up with the idea that the deaf mind has no limitations. It is as boundless as all minds. The spirit of the teacher must draw the deaf mind out of its silence. This is no impossibility. Good men and women the world over are lifting other men and women beyond the plane of their own limitations, therein performing miracles. It was Jean Valjean who said to the thief:

> My brother, you no longer belong to evil, but to good. I have bought your soul of you. I withdraw it from black thoughts and the spirit of perdition and give it to God.

So the teacher of the deaf, recognizing no limitations upon the expansion of human intellect, says to the dullest of his pupils: "My child, you no longer belong to silence, but to sound, to a possession of the judgments and attributes of the hearing. I have bought your soul of you. I lift it out of itself. I withdraw it from gloomy thoughts of silence and the spirit of discouragement and give it to God."

SOME FEATURES OF THE EDUCATION OF THE BLIND IN PUBLIC SCHOOLS

JOHN B. CURTIS, SUPERINTENDENT OF DAY SCHOOLS FOR THE BLIND, CHICAGO, ILL.

Nowhere in the educational field are correct principles and methods being more diligently sought than in the instruction of the blind. The eighty years that have passed since Dr. Samuel Howe founded the first school for the blind in the United States have been a period of steady progress. Private endowment and management gave place to governmental support and control as the education of the blind came to be viewed not as a matter of charity, but as a legitimate part of a wise public policy.

The institutions built up by the various states have done, and are still doing, most excellent work; but they necessitate the separation of the child from home for a long period, and create for him an abnormal environment. The separation from home thus brought about, and the abnormal environment of institution life, tho long recognized as evils, were regarded as inevitable. But by 1900 some of the leading educators had come to think that the public-school system of the country might be expanded to furnish to many blind children the means of avoiding the objectional features in their education; and in that year classes were opened in the public schools of Chicago. The work entered upon tentatively twelve years ago has passed the experimental stage and is now firmly established, not only in Chicago, but also in many other cities. The plan is essentially the same in all the cities, so no confusion will result if this paper is confined to a presentation of what has been done in Chicago.

In Chicago, elementary instruction for the blind is now given in four grammar schools which are located with reference to serving the different sections of the city. The formation of groups of from six to twelve children in established centers permits the work to be more effectively supervised than it could be if the pupils were distributed among many schools. Where street cars must be used in going to and from school, the Board of Education supplies all necessary carfare. Free Braille textbooks are furnished to the pupils, which are made in the printing-office maintained by the board.

In each center, there is a room devoted exclusively to the use of the blind, in which are kept Braille books, maps, typewriters, and all special apparatus required; and the group of children are in charge of a special teacher. The time of her pupils is divided between this room and the classroom, the latter receiving a greater and greater share as the higher grades are reached. Since the great aim is to secure to the blind child a very large participation in school life, an effort is made to enable him to take part in the regular classes as soon as possible. As a rule, this cannot be done fully in the first two grades. The pupil often enters school hampered by timidity and by a lack of physical control. Timidity must be

replaced by self-confidence. The necessity of bringing about physical control is urgent and calls for special attention. Then, too, the reading and writing of the Braille system of print must be taught, and this is unfamiliar to the teacher engaged in normal work. Owing to these considerations, the first- and second-grade pupils spend most of the day in the room of the special teacher. In the first grade, they usually take part in classes for singing and in English recitations where the chief feature is the oral reproduction of stories. When the second grade is reached, they are generally ready to enter the reading class. The third grade marks the point at which they enter into complete class work, and after that they take an active part in all recitations, tho it is necessary for them to receive more or less assistance from the special teacher during the entire course.

The reading recitation presents little difficulty to the blind child of average ability. His reading from the Braille text is somewhat slower than that of the children using the ordinary book, nevertheless he seldom loses his place, and he reads with agreeable fluency and with observance of proper expression. At first these lessons are prepared with the help of the special teacher, but after the pupil has made a fair degree of progress, he is left to receive only such suggestions as may come from the teacher in charge of the class.

The blind pupil maintains himself creditably in the geography class, tho his work must be closely followed by the special teacher, as many recitations must be preceded by an examination of globes or maps. Sand to the thickness of about an eighth of an inch is glued upon a globe to represent land, the surface left uncovered indicating water. From a globe of this kind an accurate idea of the earth as a whole may be gained thru the touch. For more detailed work, embossed maps are used, distinctive lines and characters being employed to represent various features such as boundary lines, mountain systems, rivers, and large bodies of water. The names of cities are indicated by one or more letters whose significance is explained by the key accompanying the map. Great care must be observed in the making of embossed maps, as they may easily be made to contain so much as to produce confusion in the mind of the pupil. The best map is that which contains a few features clearly depicted, leaving others to be gained from description. The power of interpretation thru the touch grows, and in time the pupil comes to use the map and key with a great degree of independence.

In arithmetic, the blind pupils are somewhat handicapped in not being able to follow the work done on the blackboard, but this does not prevent them from taking part successfully in the recitation. They read their problems from the Braille book and work them upon what is called a number slate. This slate is an aluminum plate ten inches square and a quarter of an inch thick. It contains rows of pockets just large enough to hold a three-eighth inch cube, upon the faces of which are Braille numbers.

By properly arranging the cubes in the pockets, any number may be expressed; and with one hundred cubes a problem involving any arithmetical process may be solved. The pupil might be taught to do very difficult work without the aid of the slate, as is done in some institutions, but if he is to maintain his place in a public-school class, he must follow the methods there used, and the number slate is a near approach to the pencil and paper.

Lessons in grammar, spelling, history, and civics are prepared from the Braille text; and as they call for little more than the careful use of the book, the blind pupils are on practically equal terms with their classmates in these subjects.

In writing examination tests and also the daily papers required in each study, the Braille slate is used. In the lower grades, these papers are transcribed by the special teacher, while in the upper grades they are reproduced in typewriting by the pupils themselves. As they are then marked by the teacher in charge of the class work, their value is judged according to the standard prevailing in the school. In some classes, it has been found possible to teach the use of the typewriter as early as the third grade, and it is safe to say that this may be done in the fifth grade with any blind pupil of average ability.

Hand-training being especially important in the education of the blind child, much care is given to this subject. A large part of the work must be done under the direction of the special teacher. For the smaller children, the making of bead articles, such as cups and saucers, napkin rings, baskets, and flowers, has proved very valuable. It calls for concentration, develops hand control, arouses interest, and brings the pleasure of creating a finished product. Raffia and reed baskets are made later. The boys of the upper grades take the elementary course in manual training, entering the regular classes for this purpose. The larger girls learn to sew, knit, crochet, and embroider. They are also admitted to the cooking classes, and they take an active part in all phases of the work. Their notebooks, kept accurately in both Braille and typewriting, are of value not only to themselves but also to the other members of the family.

The urgent need of physical training is recognized. So far as possible, the blind children take gymnastics in the regular classroom, but these exercises must be supplemented by special work. A teacher from the physical department visits each center twice a month and plans a course of training to be followed by the special teacher.

Centers have not been established for high-school work, but each pupil attends the high school nearest his home. Some Braille books covering high-school subjects have been made, tho the number is still insufficient, and a large amount of matter must be read to the pupil. This is done either at home or at school by classmates in study periods. This lack of textbooks is not wholly a misfortune, because sooner or later the blind

student must gain the power of using books and magazines in ordinary type since expense limits the scope of publications in raised print. This year, two boys were graduated from high school who received all their school training in the Chicago public schools. In high school, they selected their studies according to their tastes and aptitudes just as other boys and girls do. They joined the literary and debating societies, attended class meetings, and enjoyed all the sides of our stirring high-school life.

Such, in outline, is the method of instructing the blind in public schools. The features of it that commend themselves most strongly to those engaged in the work are two: first, the preservation of the home as a factor in the child's life; and second, the securing to him of a normal environment during the period of growth.

Unless the home falls greatly below the average standard of comfort, it exerts a beneficial influence in the development of the blind child. It powerfully aids the school in inculcating right principles of living, and in bringing out the nobler qualities of character. By remaining at home, the child acquires an interest in all that vitally affects the family. It is well for him to share its struggles, its hopes, and its successes. Moreover, the members of his family, as they are brought into daily contact with his school life, are led to render him intelligent aid; and to them comes a sense of responsibility for his success which is sometimes lacking where children are sent away to an institution. This sense of responsibility and kinship is of great importance, since the family as well as society in general has a tendency to regard the blind as a distinct class. If the blind child is made a normal member of the small family group, he may hope to become a normal member of the larger group of community life.

In the public school, the blind child is in an environment which does not differ materially from that in which he must live when school days are over. He feels the thrill of all the school activities, altho he may not participate actively in some of them. He shares in the discussion of civic problems, which appeal to him because they concern his home, neighborhood, and city. Early subjected to the force of a wholesome public opinion, he becomes like his seeing schoolmates in thought, feeling, and ambition; and in his daily competition with them, he learns to measure himself by the standards of the world instead of the standards of a distinct class. Estimating self accurately and being judged correctly by others are matters of fundamental importance to every blind boy and girl earnestly striving for success.

Tho the public school has these strong features in the education of the blind, there is no conflict between it and the institution. Each has a work to do. The future will determine just how the broad field is to be divided between the two agencies, and manifesting a generous spirit of co-operation and giving "the last full measure of devotion," they will strive on toward the solution of the great problem.

DEPARTMENT OF SCHOOL PATRONS

SECRETARY'S MINUTES

OFFICERS

President—Mrs. O. Shepard Barnum, principal, Cumnock School.....Los Angeles, Cal.
Vice-President—Mrs. William S. Hefferan, National Congress of Mothers....Chicago, Ill.
Secretary—Katharine E. Dopp, lecturer, University of Chicago .....Chicago, Ill.

FIRST SESSION—Tuesday Afternoon, July 9, 1912

The department met in joint session with the Department of Physical Education in the Gold Room of the Congress Hotel, Chicago, Ill., at 2:30 P.M., and was called to order by Mrs. O. Shepard Barnum, principal of Cumnock School, Los Angeles, Cal., president.

The resignation of Katharine E. Dopp, University of Chicago, Chicago, Ill., as secretary, to take effect at the close of the convention, was read and accepted.

The first paper of the meeting on, "Sexual Reproduction in Animals: The Purpose and Methods of Teaching It," was presented by Mary P. Blount, instructor in zoölogy, University High School, Chicago, Ill.

W. A. Evans, Northwestern University, Evanston, Ill., then presented a paper on "The Physical Growth of the Child and Its Hygiene."

This was followed by a paper on "The Selection of Physical Exercise as Determined by the Laws of Growth" by William H. Burnham, professor of pedagogy and school hygiene, Clark University, Worcester, Mass.

Discussion on this topic was opened by W. A. Evans, Northwestern University, Evanston, Ill., who was followed by Sadie American, executive secretary of Council of Jewish Women, New York, N.Y.; R. W. Corwin, Pueblo, Colo., professor of surgery, University of Colorado; and Mary P. Blount, instructor in zoölogy, University High School, Chicago, Ill.

The meeting then adjourned.

SECOND SESSION—Thursday Forenoon, July 11, 1912

The meeting was called to order at 9:30 A.M. by the president, in the Florentine Room of the Congress Hotel, Chicago.

The minutes of the last annual meeting were read and approved.

The report of the secretary for the year, including the financial statement, was read and approved.

"The Report of the Committee on School Revenue" was then presented by the chairman, Mrs. William S. Hefferan, National Congress of Mothers, Chicago, Ill.

The Summary of the Reports of the State Joint Committees was presented in printed form and distributed. Attention was called to the work being done by the School Health Committee.

The Committee on Nominations presented the following report:

For *President*—Mrs. William S. Hefferan, National Congress of Mothers, Chicago, Ill.
For *Vice-President*—Mrs. L. L. Blankenberg, General Federation of Women's Clubs, Philadelphia, Pa.
For *Secretary*—Miss Mary Zimmerman, Association of Collegiate Alumnae, Chicago, Ill. (to fill unexpired term).

The report of the nominating committee was accepted, the secretary instructed to cast the ballot, and these officers were declared elected.

William H. Allen, director of the Bureau of Municipal Research and the Training School for Public Service, New York, N.Y., then presented a paper on "Outside Co-operation with Public Schools."

This was followed by a paper on "Civic and Social Center Development" by Edward J. Ward, University of Wisconsin, Madison, Wis.

Discussion on this subject was opened by Mrs. William S. Hefferan, National Congress of Mothers, Chicago, Ill., and was continued by Luther H. Gulick, director of the Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.; Mrs. O. Shepard Barnum, principal of Cumnock School, Los Angeles, Cal.; Edward J. Ward, University of Wisconsin, Madison, Wis.; William J. Allen, director of Bureau of Municipal Research, New York, N.Y.; and Azile B. Reynolds, principal of Armstrong School, Chicago, Ill.

The meeting then adjourned.

A luncheon at the Blackstone Hotel followed the second session. Among the speakers at the luncheon were Carroll G. Pearse, superintendent of schools, Milwaukee, Wis., and president of the National Education Association; P. P. Claxton, commissioner of education, Washington, D.C.; Ella Flagg Young, superintendent of schools, Chicago, Ill.; Jane Addams, head resident, Hull House, Chicago, Ill.; David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.; and Mrs. O. Shepard Barnum, principal of Cumnock School, Los Angeles, Cal.

KATHARINE E. DOPP, *Secretary*

PAPERS AND DISCUSSIONS

SEXUAL REPRODUCTION IN ANIMALS: THE PURPOSE AND METHODS OF TEACHING IT

MARY PUTNAM BLOUNT, INSTRUCTOR IN ZOÖLOGY, UNIVERSITY HIGH SCHOOL, CHICAGO, ILL.

No educational problem commands greater interest than the question of teaching about sex. The interest is universal and intense. But the situation has not yet come into clear focus where educators see just what to do. There has been loose terminology. Any effort to teach anything in regard to sex has been referred to as the teaching of social hygiene, and that often means teaching the prevalence and the awful consequences of venereal diseases. I do not object to this when hygiene is being taught. But there is need of education in regard to sexual reproduction in animals without any reference to disease and misery. To have the subject of mammalian reproduction clearly presented in the science work of common schools is at present our greatest need, because it is the thing we have not got. By pulpit and press and parents and teachers there have been earnest efforts to lead children to moral lives. But while they have pointed to some high ideals, they have said to the child, "You must be ignorant." I am fortunate to have the attention of this audience in the departments of School Patrons and Physical Education, and I beg your interest in a less-discussed phase of the large subject.

The purpose in teaching the sexual reproduction of animals is education, not reform. The immediate purpose is not to keep the boy pure and the girl safe (altho we desire that) but to help children to understand nature—in the twentieth century to educate them above the intelligence of the seventeenth century. When Jamestown and other settlements were made and explorers pushed into the unknown regions of our eastern coast, the most advanced scientists had not explored life's realm far enough to discover the egg, the beginning of every individual. They believed that frogs came from mud, and eels from the slime on fish. And then it was found that some animals developed from eggs, and the best scholars believed that eggs might arise spontaneously, or they might come from parents. But of the never-failing continuity of life from generation to generation scientists had little conception. Certain savage people today believe that the warm rays of the sun cause impregnation. Unfortunately, only a small percentage of civilized people know much more than the savage about this. A university graduate looking at a two days' old chick embryo in which the central nervous system, eye, and heart were distinct exclaimed, "Why! I didn't know that it looked like that. I supposed it was a formless mass." I have asked intelligent and experienced teachers to describe their mental picture of the human embryo or the embryo of any other familiar animal, and they are unable to do it. It is to them a formless mass; a vague, hardly tangible something of which they have no clear picture. Their response to the subject is emotional, but not intelligent. In this, they are not superior to the superstitious savage. We teach all other natural phenomena, and regard it as essential that an individual be able to think clearly in regard to them. My argument today is that the formation and development of the animal egg, being processes in nature, are subjects for general study. And further, that the study must include mammalian reproduction. Problems in heredity may be studied in frog's eggs or De Vries' primroses. But the child's need is not satisfied until he knows how mammals reproduce. Less than a century ago, nobody knew that mammals developed from eggs. In 1827, von Baer demonstrated the mammalian egg to be a single cell. It is the privilege of science teachers in secondary and elementary schools to adapt the researches of the masters to the mental ability of their pupils. The purpose of teaching that animals develop from fertilized eggs is that children may co-ordinate this with what else they know about nature; that they may think in an orderly way in regard to it, and not be superstitious.

The real problem before us is a problem of methods—what illustrative material to use, and how it may be controlled and handled. This is a matter of interest to teachers of all grades. In the kindergarten, use kindergarten methods, of course. Only be sure that the child gets something to depend upon; something of real value to build on for the advanced instruction in later grades. As for mammalian reproduction, the really

essential thing for high-school pupils is that the subject have a scientific setting. There need be no especially delicate or cautious approach to it. The circuitous journey from the algæ or the amœbæ thru the cœlenterates, and earthworms, fishes, and birds to arrive finally at the desired subject of mammalian reproduction is quite unnecessary. If pupils are studying mammals, they know that organs are composed of cells having special functions. Then they can learn that eggs and spermatozoa are cells. And they can learn directly about the fertilization of the mammalian egg quite as easily as if they are led up to this by a discussion of fertilization in the sea urchin. With this animal, fertilization is external. Eggs and spermatozoa are floating and swimming freely in sea water, and they unite. There are many more spermatozoa than eggs. With mammals, fertilization is internal. In copulation, spermatozoa are placed in the vagina. They swim, not in a large volume of fluid, but in the mere film of moisture that covers the lining of the vagina, uterus, and Fallopian tube. If the spermatozoa meet an egg, one sperm unites with the egg. This forms a single cell, the fertilized egg. This cell divides and as a result of many divisions and continued differentiation and growth, an embryo is formed. Very early in development, the embryonic membranes are formed and the embryo attaches to the lining of the uterus and thru the placenta receives nutrition and eliminates wastes. This is the simple story. Make it plain with charts and dissected animals. For the gross anatomy any small mammal may be used. In some communities, pregnant cats might easily be obtained. Many teachers will find it more satisfactory to keep small rodents in the schoolroom and breed them as they are needed. White rats are thus easily kept. They are attractive animals and remarkably clean and pleasing in dissection. In schools lacking microscopes, it is impossible to study mammalian eggs and spermatozoa, for they are microscopic cells. But they can be described, and cleavage of the fertilized egg can be illustrated with a clay model put into shape as the teaching is going on. With such material actually before the pupils, they will get definite mental pictures. Leave no room for vague imagination. Sexual reproduction of animals is so common as a natural phenomenon that the subject should be a part of common-school education, so that he who knows that Columbus discovered America will also know what is meant by development from a fertilized egg.

I have spoken of the purpose and methods. Naturally you ask what are the results. In a class of boys and girls in the Freshman year of the high school, demonstration had been made of pregnant animals—a cat and a rat. A simple diagram had been put on the blackboard to show the relation between embryo and mother. The following parts of the diagram were labeled—uterine wall, amnion, chorion, placenta, and umbilical cord. A boy studied the diagram for perhaps ten minutes and then exclaimed, "Well, gee! There couldn't be much improvement in that,

could there? The way that embryo is protected inside of those membranes!" Pupils respond with interest. They say that a course of study including this work should be required, not elective. It is only adults who are doubtful. We never shall teach this subject right until we "become as little children."

THE PHYSICAL GROWTH OF THE CHILD AND ITS HYGIENE

W. A. EVANS, M.D., NORTHWESTERN UNIVERSITY, EVANSTON, ILL.

Stanley Hall says (Vol. II, p. 637):

> The first aim which should dominate every item, pedagogic method and matter should be health—a momentous word that looms up beside holiness, to which it is etymologically akin. The new hygiene of the last few years should be supreme and make these academic areas sacred to the cult of the goddess Hygeia.

The food of a child is burned into energy and tissue. Numerous observers have noted the effect of food on growth. While it is true that the body cell does not know whether the nitrogen which it is building into tissue came into the body as milk or meat or carrots or nuts and, therefore, there is but little scientific basis for food faddism, there are several observations on children that show that underfed children average undersize. Of course, every farmer knows that he can runt a pig or calf or colt by starving.

The relation between the use of food for energy or for tissue has also been pretty well worked out. Without discussing at length, we can say that a moderate amount of exercise coincident with an abundant food supply will increase the amount of tissue-building. Briefly, some of the more important modifications of this law are these: If the tissue, for instance, is overused, the use begets a temporary break in upbuilding. This, in the case of muscle, is due to the development of lactic acid which causes a colloidal absorption of water and salts. The inherent recuperative powers are such that presently the protoplasm exudes the toxic elements and a state of potential tissue-building is re-established. The toxic action may be destructive and growth may be stopped or atrophy may ensue. If the food supply is insufficient for the extra demand, growth stops. Illustrations are the well-recognized runting from childwork, the runting of colts left out of doors during cold weather, and finally, tho not entirely apropos, if the tissue is a useless or inert tissue, the use of the part causes the tissue to atrophy regardless of the food supply. I have reference here to the disappearance of fat from between muscle bundles or other active areas during the periods of activity. This is not my theme, however.

In the growth of the child, there are several forces back of food, energy, and tissues. One of these is inheritance. Mendelism and eugenics have established this point very well. A child is born with inherent tendencies which compel it to be of a certain stature, weight, and build at each year of its life. That inheritance may be influenced by food, exercise, hygiene,

and in other ways, but it cannot be entirely done away with. Children are born to be large or small, to grow fast or slow, to be fat or thin, to be catchers or to be immune, to have consumption or rheumatism. This view, to my mind, makes two actions imperative: First, that eugenics be made a practical workaday matter of consideration, the time for limiting it to academic discussion having passed. Second, that inheritance which drives one toward susceptibility, overgrowth, undergrowth, obesity, feeble-mindedness, epilepsy, migraine, or any other disability- or inefficiency-breeding condition be recognized and promptly taken into account, and that training and hygiene be made use of to correct or to modify the disabling condition.

Between the primal growth-instinct of inheritance and the ultimate growth-means of food, energy, and tissue-building, there interpose two growth-directing forces. The first of these are the ductless glands stimulating pre-adolescent growth, and these, in the order of their importance, are the thymus, the thyroid, the pituitary body, and the adrenals. The second are the ductless glands stimulating post-adolescent growth. I mention these in the order of their importance—the sexual glands, the pituitary, the thyroid, and the adrenals.

I am a believer in the efficiency of food intake in growth but I think that this is only a partial view. I am a thoro believer in oxygen as an element without which food furnished the ultimate cell is not eaten by that cell. I believe in doing everything possible to maintain the oxygen tension in the air, in the air sacs, and in the hæmoglobin of the blood. But that, too, is only a partial veiw. I believe in the doctrine of Martin Fisher. The blood and lymph circulations carry fluid to the tissues and away from them, but what the tissues will take up or give off rests with them, or, in simpler phraseology, the tissues preside over their own nutrition and growth. But that, too, is only a partial view.

The impulse to grow differs in its origin and in its method in its two periods. The thymus period extends from birth to puberty; the sexual gland period from the beginning of puberty until growth is attained. In each of these periods other glands are contributing, for the mechanism of the growth-impulse is a compound. But there are dominating glands and possibly master glands—at least such has been asserted.

A basic principle is that, during the periods of growth, the body is exceptionally impressionable. It is more impressed by bad ventilation, bad feeding, prolonged concentration than at any other life-period. I do not mean that bad hygiene causes more disorders than at any other period. It does not. The body, at this period, has a large reserve on which it draws with some extravagance. These strains use up an undue amount of reserve, they scar the body, tho the effects may not be seen for many years after the cause has operated and, frequently, for many years after it has ceased to operate. The best illustration that I can cite is the general

recognition that the heart and kidney diseases of adult life are, in great part, manifestations of infection in childhood. We say that the child's recuperative powers are good. It is the generally accepted opinion, at the present time, that there are approximately a determined number of reproductive impulses in a cell and that to use up an undue number of these in childhood by reason of bad hygiene is to lop off some from the other end of the string, even tho recovery appears to have been complete.

With the general admonition that, in this period of thymus gland growth, the child will not prosper mentally or physically without a proper regard for hygiene, I pass to the period of adolescent growth.

At this period, there is absorption of internal secretions from the sexual glands, and, in consequence, the being undergoes most profound changes. There are marked changes in the bony skeleton, in the contour of the trunk, in the muscular development, in the size and shape of the larynx, in the skin and its appendages, in the subcutaneous fat. In fact, the changes are universal.

These skeletal, muscular, and contour changes are well recognized. What is not usually understood is that there are organ changes which are commensurate with those more readily appreciated. The chest is deep and narrow before birth, round at birth, and relatively deep and narrow at puberty, at least as compared with maturity. The chest index is gained by dividing its depth by its width. The index of puberty is 78; the index of maturity is 71. Rather oddly, the chests of consumptives, of paupers, of social derelicts are of the adolescent index. The heart and vessels of post-puberty are found radically changed from the pre-puberty dimensions.

Nor does the mind escape. In fact, it is the most changed of all. My especial plea is that recognition of the facts of puberty enter into the mental and physical regimen of the school. First, the changes are rapid. Therefore, modifications of studies, of hours, of methods, must be done at shorter intervals than twelve months. Secondly, the changes differentiate the male from the female mind and the courses should be modified to suit these variations. I quote Dr. Scharlieb in *Womanhood and Race Regeneration:*

> The changes, physical, mental, and moral, that occur in young girls are so great, the development of their natures is so rapid, that the ordinary hard-and-fast rules of school and college are likely to fail in securing the maximum result. This point may be illustrated by the experience of exercise and game mistresses in Sweden who have long been aware of the fact that, altho girls up to puberty enjoy their exercises and profit by them in the same manner as do the boys, yet the time comes when exercises are badly done.

It is the rule rather than the exception that both the mental and the physical work must be varied with the varied capacity of the pupil. I think about the same is the view stated by Hall in *Adolescence.* This is not an argument in favor of limiting or narrowing the work of women, for I do not believe in such narrowing. It is an argument for broadening the work of women along the lines where broadening is natural rather than the employment of

one means for all cases. Nor is this limited to the female sex. At puberty the male type rapidly differentiates. As Metchnikoff has made so clear, there are feminine types of mind in men and there are gradations from that up to excess of masculinity and what is a good method for one is not a good method for another.

At this second period of growth-activity, we are also in a time of plasticity, and in such times good hygiene makes for good, and bad hygiene makes for bad to an exceptional degree. The adolescent in a hot, dry school air gets anæmic, flabby, and neurasthenic, or develops St. Vitus' dance more rapidly than does a younger or older child. While ordinary susceptibility has been decreased, so-called rheumatic susceptibility has increased and consumption susceptibility has enormously increased. The adolescent is doubly in need of fresh air, exercise, good habits, and good food. On the other hand, the amount of food required per pound of weight decreases. Just after puberty, the tendency to embonpoint comes, due to two causes—the thyroid gland is beginning to show senile changes and its secretion to lessen. The amount of food taken in the usual case is greatly in excess of the bodily needs. For this reason, in part, this is the pimple age.

With one other suggestion, I will close. Adolescence is the period of introspection. The mind asks questions as to those sexual glands. It is wise to have those questions answered by the wise. The groping mind trying to answer them itself too often finds answer that is ruinous.

Stanley Hall states that, with puberty, we must change not only our educational but our hygiene methods, not only as compared with those of the pre-puberty period but also as between those adaptable to boys and girls and, in greater measure than ever before, as between individuals. Standardizing becomes increasingly difficult.

In passing, it would seem to me that we should not drop this view of things where the school teacher leaves off. A man may be of a feminine type and regarded as useless or harmful by men who gauge men by a standard in which masculinity scores fifty out of a possible hundred, yet many of the artists, litterateurs, and others who have dreamed the world into better things have been of this type. Much of the leadership in times of great stress has been by men of this type. A woman may be of the masculine type driven by physical, organic forces over which she has no control.

Standardizers using a score card on which femininity calls for fifty out of a possible hundred would reject such, yet, the proper sphere found, she scores a hundred. It has never seemed to me that this view of variation in type meant limitation of the field for women or for men. Rather it seems that it is a part of the general tendency to recognize variations in type of work and, therefore, in the type of individual who, in doing that work, would score one hundred. I am sure that, with such a view prevailing

among teachers teaching adolescent pupils and among people at large, we should have fewer square pegs in round holes, fewer misfits, fewer failures, fewer discontents, fewer suicides, greater social stability as well as greater social efficiency.

Metchnikoff, whose opinion is probably more broadly founded than that of any man living or dead (for he draws alike on sociology and biology), is of the opinion that, in all of this social trend, there is nothing which suggests the development of an asexual group much less of an asexual type.

The technique neither of pedagogic nor of hygienic method lies within the scope of this paper. They are to be found hinted at in works dealing some with one and some with the other. At best, there is still need of great study and trial in each field. Dr. Hall has rightly said that, in this field, neither teachers, physiologists, nor hygienists are ready to say the last word. Just this confession universally made would clear the field for further advance.

There are certain hygienic requirements that pertain to both pre-adolescence and adolescence. I think even these are modified by adolescence—the harm done by their neglect being greater than that done the younger child. Of these requirements, which begin at the beginning and run thru, are good air, good water, good food, and exercise. That air may be judged good, it is necessary that it conform to requirements of condition rather than of chemical constitution. These conditions are that the temperature should not rise over 70°, that the humidity should not fall below 50°, and that there shall be perceptible air movement all of the time and violent air movement from time to time. Light and dust conditions are of lesser consequence.

While it is necessary that temperature should never exceed 70°, it may be kept below 65° with advantage under certain exceptional circumstances. These are, provided clothing is heavy enough, physical exercise is active enough, and feeding is abundant, that the heat made by the child may keep the skin as warm as 97° at all times.

Taking it on the basis of the law of averages, large stature cannot be attained without the stimulus of cold. Inheritance may be driving for 180 pounds at maturity; constant immersing in warm air will stop growth at 170. Good feeding and exercise, it may be calculated, will make a frame 5 feet 11 inches; warm air will stop it at 5 feet 10.

The peoples of colder climates are larger in frame than those of warmer, the exceptions being those races whose food supply is poor and whose hygiene is bad. In order to make heat, larger quantities of food are absorbed, and some of this excess, if the supply is ample, goes to building tissue.

In school, dealing with the human in its plastic phases, they should strive for the standards of the colder climate rather than the warm and that is a maximum of 70°, a temperature of 55° for catchers, adenoid cases, and a

few allied subnormals, outdoor schools for more definite subnormals of the same type, and opportunities for periodic play in the cold for all children.

As to humidity—while a low humidity adds to comfort in hot weather, it adds to both discomfort and susceptibility in cold weather. I refer now to indoor humidity.

The next requisite of good air is that it shall be moving. Currentless air is harmful air. Draftless air is deadly.

The teaching of Rosenau who thinks much of the harm of air is due to chemical toxicity, of Pflugge who thinks the harm in the main is from heat and humidity, and of Leonard Hill who thinks it comes from a polluted aerial envelope, or of Sedgewick who thinks it comes from pollution of that part of the envelope known as the breathing zone—all of these teachings unite in requiring that the air move at all times. In addition, from time to time, the air must be blown out by throwing the windows wide open.

If the harm done by bad water were limited to typhoid fever, it would scarcely be worth while to discuss the question, but the Hazen and Whipples law that the harm done by water-born typhoid is but one-fourth the harm done by bad water is pretty generally accepted now.

As to the relation of food to the hygiene of the growing child, I would advocate that energies be especially concentrated on furnishing him more food. Growth having been attained, filling out begins. Filling out is the deposit of fat in different parts of the body. Fat means an excess of food intake over food use. The adult stands convicted of overeating. It is *res adjudicata* of the United States Senate. Per contra, the figures furnished by those who have examined large numbers of school children, the dietary investigations of the national government and various state colleges prove that the average school child is not overfed.

Regulated exercise is hydra-headed. Its benefits are many. Its results ramify widely. It has to do with oxygenation, with nutrition, with social training, and with education. Martin Fischer has proven that the use of food by the tissue is dependent upon a local oxygen supply. Exercise means a greater oxygen intake, a greater oxygen tension in the lungs, in the hæmoglobin, and in the tissue spaces. Exercise is a circulation aid, assisting both blood and lymph circulation, pumping waste out of the tissues and pumping food into them. Exercise develops the social instinct in that the best exercise is play and practically all play is communal.

And finally, that educational effort in which each one thousand units of effort return the largest number of units of result is that in which education is based on the play instinct—and the best exercise is that called play. Perhaps certain requirements of training cannot be brought about by play, but in such we must recognize and accept a smaller return from effort expended.

THE SELECTION OF PHYSICAL EXERCISE AS DETERMINED BY THE LAWS OF GROWTH

WILLIAM H. BURNHAM, PROFESSOR OF PEDAGOGY AND SCHOOL HYGIENE, CLARK UNIVERSITY, WORCESTER, MASS.

The subject allotted me presents a group of problems. We know little about the laws of growth. Growth is determined by many conditions. For some reason it is not continuous but periodic. All investigations show this. There is usually a spurt of growth and then a retardation. Growth, too, is by parts; different organs grow unequally at different times. Perhaps the best known of the spurts of growth is that correlated with, or as used to be supposed, preceding the sexual development of puberty. The whole mysterious growth impulse is perhaps correlated with, perhaps determined by, the sex instinct. Both perhaps are determined by a deeper rhythmic nisus. At all events, there are marked periods of growth and these cannot be determined by mere age. Physiological age does not coincide necessarily with chronological age.

What does physical training directly accomplish? To give a general answer, it modifies function; and here lies its whole value for health and development. A general statement of the prime condition of health may perhaps be formulated somewhat as follows: it is a condition or unhindered functioning of all the organs of the human mechanism. Without normal functioning the normal development of structure is impossible. And more concretely, the advantages of functional activity may be illustrated in many ways. Take, for example, the heart and the circulatory system. Not only is the functioning of the heart essential for the maintenance of the life of the whole body, but the health of this organ itself depends upon its activity, and cardiac disease is often cured by stimulating its exercise. Sir Lauder Brunton maintains that the heart in its contraction and dilatation effects a kind of self-massage which promotes its nutrition, and that the arteries also have a power of self-massage, and the full and healthy arterial pulse exercises a form of massage on the veins and on the nerves also which are bound up in the same sheath. Again we find that the nervous system apparently functions in rhythmic periods, and probably the discharge of energy and the breaking-down processes are an essential condition for the anabolic or building-up processes that go on in a succeeding period of rest.

The great problem is that of the relation of function to growth. Does an organ have a special period of growth and then a period for the acquisition of function, or do the two processes go on simultaneously? We have usually made the simple assumption that an organ first grows and then acquires function, or at least that the predominating factor is one or the other at any given period of development. Perhaps the matter is much more complex than this. Apparently the nascent period of an organ is the special opportunity for the development of function and the time of special

danger of premature and unrelated developments. Take, for example, the general bodily and mental development at puberty, the spurt of growth, the sexual development, the apparently greater vitality and ability to resist chronic disease, the remarkable mental development. Are these consecutive developments or the manifestations of a general impulse of acceleration appearing in different ways? We do not know. Dr. Boaz, our greatest expert in the study of growth, inclines, I understand, to the latter view. This problem is fundamental. The views we take of it will determine largely our attitude to many concrete practical questions.

Is a child capable of more work during the period of accelerated growth, or should, as popular opinion has it, the work be relaxed when growth is rapid? Should an organ receive training during the period when it is rapidly developing, or should it be spared? Should the voice, for example, be trained during the period of mutation at puberty; or should it be spared from training altogether? About all we can say is that function, in the first place, conditions growth. In the second place, it is probably correlated with growth, and, finally, it remains as a condition of health after growth, in the narrower sense of the term, has ceased.

Thus I would call your attention to a general subject of vital importance about which we know little. It will take a long time to investigate this problem. Meanwhile a few practical suggestions may be made.

First: Until we know more about physiological age and this problem of the relation of function to growth, it is well at periods of accelerated development to make the work as spontaneous as possible, giving ample opportunity for free play and manifold physical activities; also perhaps giving opportunity, as Jean Paul Richter urged, for inactivity, even for idleness at certain periods.

Second: In a general way we can determine physiological age and adapt our training to the sequence of the stages of physiological development. In a general way this is recognized; but with our present inadequate knowledge of physical development, we cannot outline any thoroly scientific course. We do know, however, that there is a great difference between the physiological condition of the child up to the age of puberty and the adolescent after puberty. The old investigations of Beneke indicate that during the period of development the volume of the heart increases twelvefold, but the width of the aorta only threefold; or in respect to 100 cm. of height, in the case of the child the heart volume is about 50 c. cm., in the case of the adult 150 to 190 c. cm. These measurements should be repeated with much larger numbers; but whether or not these figures are right, during the school period there is a great change of the circulatory type. In the child a relatively small heart drives the blood thru large arteries; in the adult a large heart drives the blood thru relatively small arteries.

Hence, as everybody knows, the child is capable of violent exercise

for short periods, because built for it, and the adult is liable to be injured by such exercise. This is merely an illustration. There are many differences between the physical mechanism of the child and that of the adult. Likewise there are differences between children at different ages.

Probably there is a difference between the nervous system of children and adolescents and in the capacity or ability of the nervous system for storing energy. For some reason not well understood, neuro-muscular energy does not seem to be stored up by children in the same way that it is by boys and girls after puberty. Roberts, the English anthropologist, applying this to athletic sport says:

> With respect to the more active form of exercise it is certain that football, cricket, and athletic contests, running, etc., do not meet the requirements of young children. . . . . For some reason not well understood, children under the age of twelve or thirteen cannot be trained like older boys for athletic sport. The muscles will not increase in size and harden in the limbs, in short, will not "train." . . . . The physical work done, therefore, is the day's supply of energy and not the accumulated energy and adaptiveness of muscle associated with training, hence football soon exhausts young children and is too violent while it lasts to be of permanent advantage. The same objection applies to all forms of violent exercise in the gymnasium or elsewhere, hence small children enjoy playing games and are more benefited by them than by athletics or gymnastics with apparatus. There are, however, many light gymnastic exercises with light dumbbells, bars, and clubs, suitable for young children of both sexes, and they are frequently taught in school.
>
> After the age of thirteen years the body becomes capable of training and the sinews and muscles add to their energy from day to day, provided the exercises are not carried on to the extent of producing fatigue and exhaustion. Athletic and active games are the most useful form of exercise after the age of thirteen or fourteen. . . . . They should be made the central feature of physical education to which all other forms should be supplementary.

We cannot set down the capacity for training at a definite age as Roberts does; but he is quite right that prolonged violent exercise is not the proper kind for children, but that play should have the chief place in the years before puberty.

Perhaps the most successful attempt to devise a plan for physical training adapted to age and physiological development is that made by Dr. Schmidt of Bonn and elaborated by Superintendent Johnson of Pittsburgh. During the first period of school life, from six to nine, a child's exercise should be entirely in the form of free play, and this out of doors as much as possible. Exercises which involve the large muscles and which stimulate respiration and circulation are required. Such exercise is best given in the form of children's movement plays. During the next period, from nine to twelve, the plays can be richer in content and greater demand can be made upon skill and speed. The various ball plays, running, jumping, and the like, are in place. Gymnastic exercises as such should have only a small place, amounting to half an hour a day. The period from twelve to fifteen is characterized by the beginning of stronger growth of the lungs and heart. Running exercises, swimming, skating, and the like, are in place. The

gymnastic exercises and the demands upon skill and strength may be increased. Exercises with apparatus may be given sparingly. During the period from fifteen to seventeen a special characteristic is the growth of the heart in relation to the arteries. Connected with this usually is greater increase in height. Plays involving competition are in place, association football, cricket, basket-ball, and the like.

While perhaps open to criticism in some details, the main features of such a program appear hygienic. But beyond a few general points like these we cannot go. We have no data to show in detail what system would be adapted to the sequence of the stages of development.

Third: It helps very much to determine many practical problems if one has a clear idea of the aim of physical education. Applying to it the principles of educational psychology, as we should to any other subject, the aim is the acquisition of habits of healthful activity and the development of permanent interests. The only way to develop habits and interests is to base the new on the habits and interests already existing. Now physical education appeals to some of the deepest of all interests. It is based upon the most generic of all instincts, what may be called the instinct of activity, the tendency to display energy, the impulse to action for its own sake, the matrix out of which the special instincts are developed and the germ of productive activity. It is associated in its origin with the most fundamental activities and emotions of the human race. Thus physical education should be considered in the perspective of racial history, and appeal should be made to the fundamental instincts and to the interests that have developed out of them, and the aim of it all should be to develop permanent interests in healthful forms of activity.

Likewise, these interests vary at different stages of psychological development. Young children, for example, are particularly interested in living things and in moving toys, and in their own physical accomplishments as individuals. Adolescents become interested in group games and various group activities. In all stages of development there is interest in movement and in whatever the individual can do easily and well. The great fundamental instinct of activity in its different manifestations, in the various work activities on the one hand, and the various play instincts on the other, is fundamental and omnipresent.

The importance of such development of interests in physical exercise might be emphasized from many different points of view. There is time here for notice of only one. Every interest is a means of self-control, and among the most wholesome interests, those that serve as an anchor in time of stress for their psychological quite as much as their physiological value, are the interests in various forms of physical activity. The development of such interests means real hygienic, pedagogical, and moral training. An earlier paper this afternoon related to sex hygiene. A moral might be

added from our present point of view: physical education gives opportunity for a certain preventive training.

There is an old story of the experience of Ulysses with the sirens, somewhat as follows, as I recall it: When Ulysses passed the island where the sirens dwelt, so the story runs, he filled the ears of his crew with wax and had them bind him with the stoutest thongs, giving orders that under no conditions, by no appeals or threats, should he be released until they had passed this place of temptation. But the sequel is, on another occasion, when Orpheus was on board, neither crew nor leader had need of thongs and wax, because Orpheus could make better music than the sirens.

The old story teaches the soundest psychological truth and illustrates the pedagogy of training. In our modern life the adolescent girl is not safe outside of a nunnery, and the adolescent boy is not safe outside the walls of a reform school, unless they have heard better music than the modern sirens can make. If you allow them on the streets of a modern city, you must stuff their ears with wax, shade their eyes, and hedge them about with all manner of limitations, unless you have given them this better music; in other words, unless they have had actual moral training, and wholesome interests in legitimate activities have been developed. Physical training gives opportunity for the development of an important group of such interests.

All this, too, is very general; and it may be added that most of the literature on physical training presents the merits of physical exercises in a general way. Exercise is represented as a good thing because of its effect on the structure of the physical organs and the physical functions of the body, but this is all very general. We must now be more concrete and more definite. The physical organs and functions differ at different stages of development and the great problem of the future in physical training is to determine the proper adjustment of exercise to the different stages of physiological development.

It is worth a great deal, however, to have gained a clear insight that the aim of physical education, like the aim of education in general, is the development of permanent interests; and here all the accepted laws of interest apply. Interests vary at different stages. Interests may be prematurely developed and in this way dulled and destroyed. On the other hand, undue delay means loss of opportunity and the probability that proper interests will never be developed. If, for example, youths at adolescence do not acquire an interest in physical exercise, if they do not acquire an interest in group sports and the like, the chances are that such interests will hardly be developed later.

The most that is possible now is to emphasize the importance of this problem of adaptation. The problem has two aspects—adaptation to physiological development on the one hand, adaptation to psychological

development on the other. The importance of studying this problem can hardly be overemphasized. While waiting for the results of such investigation we should adapt the exercise to the more obvious differences between children and adolescents and in cases of doubt make the exercise as free and spontaneous as possible.

DISCUSSION

W. A. Evans, M.D., Northwestern University, Evanston, Ill.—I served on the Vice Commission in Chicago. The commission agreed that it would not publish any recommendation that was not the unanimous vote of the commission. When it came to the consideration of the teaching of social hygiene, the commission was divided and so no recommendation was made. If the commission were to go over its work again two years hence, I venture it would be ready to recommend the teaching of social hygiene in the schools. I take issue with the one who read the paper who said that the purpose of the teaching was not reform. The scientific teaching of the subject is not enough. It is a question of reform as well as education and should include a consideration of legislation, of eugenics, as well as other phases. As a member of the Vice Commission of Chicago, I gained much experience which bears upon this topic. It seems necessary to understand and to do away with the diseased mentality, and the conditions from which vice develops.

Sadie American, executive secretary of Council of Jewish Women, New York, N.Y.—The scientific teaching in regard to sex is not enough. It must be carefully done, else more harm than good will result. It must be done only by the most skillful and those especially prepared. The ordinary teacher cannot do this work, and it should not be put upon her. We should work with the child's emotions. There is a great work for the home and the church to do. The subject should be taught simply and reverently, not too much in detail, lest the child's mind dwell upon it too much.

R. W. Corwin, Pueblo, Colo., professor of surgery, University of Colorado.—I believe the teaching of sex hygiene is good if properly taught. I believe in the segregation of the sexes for this teaching and that we should look to the Mendelian theory in our teaching of eugenics.

Mary P. Blount, instructor in zoölogy, University High School, Chicago, Ill.—I am interested in the work of the Vice Commission of Chicago, but neither that nor social hygiene is my subject. The discussion that has followed my paper simply proves the point I made—that any reference to teaching about sex has been taken to mean teaching social hygiene, and about sexual vice. I would not have the education stop with mere scientific instruction, but would have science plus ideals. If there were no sexual vice in the world, and if there were twice as much as has been revealed by the work of the Vice Commission of Chicago, there would be reason for teaching children about the sexual reproduction of animals, because this process is a part of nature. Those who are teaching social hygiene will get much help from a textbook in physiology to be published next autumn by Scott, Foresman & Co.

REPORT OF THE COMMITTEE ON SCHOOL REVENUE

HELEN M. HEFFERAN, CHAIRMAN NATIONAL CONGRESS OF MOTHERS, CHICAGO, ILL.

The following editorial appeared in one of the Chicago papers recently:

TEACHERS IN PUBLIC SCHOOLS

Dr. P. P. Claxton, United States commissioner of education, in a newly issued report, announces that, counting all public-school teachers, both men and women, high-school teachers as well as elementary teachers and city teachers as well as country teachers, the average annual salary for the whole country is under $500. In eleven states the average salary is less than $400; in eight states it is less than $300; in two states it is less than $250. "For salaries like this," declares Dr. Claxton, "it is clearly impossible to hire the services of men and women of good native ability and sufficient scholarship, training, and experience to enable them to do satisfactory work."

In view of these statistics as to salaries it is not surprising to learn from another source that 50 per cent of all the teachers in the United States are under the age of 24 years; that 25 per cent have had but one year's experience or less; that 50 per cent have had only a high-school education or less, and that the average time of service of a teacher before leaving the profession is about four years. These figures present a perfectly plain problem. Low salaries mean that as a rule the more ambitious, forceful, capable, and in general more desirable teachers soon leave the profession.

In general, one may say that even the competent teachers who continue in the service often cannot do their best work because their salaries are not sufficient to relieve them from worry and otherwise enable them to make full use of their talents.

A statement of this kind is sufficient to show the need of a revenue committee in connection with the Department of School Patrons, the purpose of which is to arouse the civic consciousness of the community to the need of more school revenue, to the need of studying school budgets and bringing about vigorous action on the part of school patrons to enlarge the revenue for school purposes. At the beginning of this year a leaflet was sent out with the ultimate object of arousing organizations doing civic work to the need of giving programs during the year to the discussion of revenue for school purposes—how obtained and what citizen co-operation would be effective in increasing school revenue. The leaflet contained the following message:

First: A quotation from Hon. Francis G. Blair, state superintendent of public instruction of Illinois:

I am convinced by my experience here in Illinois, and by comparisons with conditions in other states, that the only way to make our schools what we think they should be and what they ought to be is to secure more money to employ better prepared and more competent teachers, to buy better grounds, to build better buildings, and to project better courses of study. This means a campaign to create sentiment among school patrons, taxpayers, and lawmakers.

Second: Suggestions for the joint state committees as follows:

The school budget is a matter about which many citizens are not well informed. The first that they know about it comes from the newspapers which publish the rate of taxation which the board of education has fixed for the year. The budget itself is not

published, and seldom is any adequate account given of the educational work planned for the year. The attention of the citizen is thus focused upon the rate of taxation; and if tenure of office in the board is dependent upon the public, the members are held politically responsible for any increase in the tax rate. Is not this situation largely due to lack of information concerning the budget? This surely is a question deserving the attention of the joint state committees.

State committees can co-operate with school authorities in arousing a general interest on the part of school patrons and taxpayers in the school budget and its relation to actual educational needs. School superintendents can call meetings of school patrons and citizens to consider such problems as these, as well as those outlined in "An Appeal to the People by the Committee on School Revenue of the Department of School Patrons":

I. The ideals for which the community shall stand:

1. Shall the school property and equipment in general be a model in proper heating, ventilating, and cleanliness for all homes of the city?

2. Shall the school grounds be such as to inspire civic pride?

3. Shall the school property become a social center for the common activities of the community?

4. What shall be the policy of the administration with regard to such questions as: (*a*) the public kindergarten; (*b*) the educational use of industrial occupations in the grades; (*c*) the establishment of special departments for manual training and domestic science?

II. The means of raising school revenues:

As an illustration of what can be done, it may be stated that thru the co-operation of teachers and school patrons, the state appropriation in Illinois was increased last legislative year by $1,000,000. This means that each school district will receive fifty cents more for each child than it has heretofore. A city the size of Bloomington will receive about $4,000 more than formerly, while Chicago will receive an addition of about one-third of a million.

What has been done in Illinois can be done in any state. Let us focus attention upon two problems:

1. How to secure thru a fixed rate of taxation an adequate state fund for distribution to all districts of the state, and more especially to those districts which are unable to raise sufficient revenue to maintain schools.

2. How to secure a law enabling the district to tax itself liberally for the establishment and maintenance of schools.

Will your organization co-operate with the school authorities in the solution of these problems?

The response from the states altho not showing any startling results shows that a campaign of enlightenment has started in a small way.

From one state comes the word that "the state board o education is making a study of the question so as to present some definite recommendations to the legislature of 1913." From another state comes the word that the matter will be taken up at the meeting of the State Federation of Women's Clubs and that all affiliated clubs will be asked to begin a campaign of enlightenment as to sources of revenue for school purposes. This was very emphatically emphasized in the report of the chairman of the Education Department of the Illinois Federation of Women's Clubs, especially as to the restoration of the two-mill tax. Twenty-one states thru their joint committees responded to the request to take up the study of the question

either this year (if not too late) or next year, which in many states will be the legislative year.

In conclusion, I would quote from the "Declaration of the National Education Association," in session in San Francisco last year (July, 1911) to this effect:

> The increased cost of living and the steadily increasing number and scope of educational activities have rendered it necessary that larger expenditures be made for schools than in the past; it therefore becomes imperative that all communities in the nation recognize, as many have already done, that more money must be contributed and expended for schools, both locally and by the state, if our young people are to have that kind and quality of education demanded by the times.

SUMMARY OF STATE REPORTS OF JOINT COMMITTEES AND AFFILIATED ORGANIZATIONS, 1911–12

It has proved impossible this year to incorporate or even to indicate in this summary all the many and full reports received. The necessary omissions are deeply regretted. Two groups were decided upon because these particular groups will be represented in two other reports now printed and available on application. First, there were more than thirty reports from joint committee members representing federations of women's clubs. See report of the Education Department of the General Federation of Women's Clubs for this biennial period, 1910–1912. Second, in many states, efforts were concentrated on improving the health conditions of school children and urging attention to personal and sex hygiene. See tabulated report of the chairman of the School Health Committee, Mrs. Maggie W. Barry, North Texas College, Sherman, Tex.

Alabama.—The Joint Committee plans continuance of work begun in 1910–11 for compulsory education and for a woman's dormitory at the state university.

The Montgomery Circle of Mothers reports lectures on hygiene and educational topics. Copies of *One Thousand Good Books for Children* have been placed in the hands of mothers, and support given various co-operative undertakings.

In 1911 there was $39,622.54 expended upon the improvement of rural schools thru rural school improvement associations. In 1912, $50,000.

Arkansas.—The Joint Committee reports efficient co-operation with the juvenile court, aid by college women of the playground movement and associated charities, and scholarships. For increased school revenue the state tax commission has "very materially increased the valuation of property thruout the state." For the improvement of health conditions of school children a bill was passed (1) giving the state board of health the supervision of all school building plans, for approval as to ventilation,

lighting, etc.; (2) securing plans for effective medical inspection. Thru an error in engrossing, the correct bill failed of signature by the governor. The state department of education expects its renewal and success at the next session.

Delaware.—The member for the Congress of Mothers reports courses of lectures and demonstration in nursing and domestic science; work for pure milk, for dental care of school children, for the improvement of school buildings, the installation of sanitary fountains, and the provision of playgrounds; also aid in organizing Boy Scouts, boys' guilds, and road patrols.

District of Columbia.—A member of the Joint Committee reports admirable work by the Jewish women for immigrant aid, especially night schools, English classes, and patriotic instruction preparatory to good citizenship. An appropriation of $12,000 was secured from Congress for these night schools. Clubs giving training in various practical industries are maintained. The Children's Welfare Committee is doing peculiarly thoro personal work for children in need of bodily upbuilding, moral regeneration, or improved home conditions.

The Federation member reports consideration of health matters and sex hygiene, and a valuable course of medical lectures on the subject.

Georgia.—The excellent work planned last year has been continued. Three of the desired improvements have been attained: "The reorganization of the state board of education so as to provide for a partly professional board; the changing of the office of state school commissioner to state school superintendent, with increased salary and an increased force of assistants; the necessary appropriation to operate the state normal school at Valdosta previously legally established but not financed." A new leaflet clearly indicating state-wide needs has been circulated and will be used as a program for work and study by several organizations.

Illinois.—The Patrons Department enjoys this year the great opportunity of meeting at Chicago, and of learning directly the progressive methods of the schools, of the volunteer organizations, of national leaders in social service. A crowded summary of the admirable reports received would be a work of supererogation when the authors may be met and the actual achievements studied.

The Illinois Joint Committee has co-operated most generously in preparing for the Patrons Department meetings.

Iowa.—Mrs. Conrad of the Joint Committee forwarded valuable programs from Mothers' Association meetings at Grinnell. Mrs. Faville of the Federation household economics committee has made appreciative use of the Patrons Department health leaflets.

Kentucky.—The chairman of the Joint Committee reports that in one city four prominent organizations have become interested in hygiene and medical inspection for the schools; that one university has carried thruout

the year a scientific course for men, and for one semester a course for women; its lecturers have gone out to the high schools and clubs of near-by towns. The normal-school presidents have been urged to have their students trained in these subjects.

One member, now of the state department of education, has visited between 60 and 70 counties, organized in them school improvement leagues, and helped raise sums for school improvement ranging from $300 to $32,000. In half the schools of one city she has organized parent-teacher associations, and in all sought to arouse interest in medical inspection and home economics.

Other good news is the School Suffrage bill for women, the abolition of the public drinking-cup, and large appropriations for the state university and normal schools.

The Council of Jewish Women have "completely metamorphosed" one rural school, making it a true neighborhood center, with larger sanitary building, greatly increased attendance, manual training, individual drinking-cups, penny lunch, and with mothers and neighbors vitally interested.

The Daughters of the American Revolution have concentrated on education, providing more scholarships, a standing committee on school health, and volunteer members who quietly and personally gain the confidence of high-school boys or girls, who need such wise friends in many unrealized ways.

The S.A.C.W. has investigated high schools in the state and made a report which shows their status and relation to an acceptable standard.

Louisiana.—The member for the Federation reports earnest attention to household sanitation, to the fight against tuberculosis and typhoid, to the necessity of having schools with better sanitation and ventilation, to the importance of protecting pupils from communicable diseases by systematic examination, and to the need of teaching personal and social hygiene.

Maine.—The chairman reports that after investigation of the work of about ten organizations doing something for rural-school betterment, the Joint Committee decided to concentrate for the present on the improvement of rural-school libraries. Each member makes her town a center for this work; one is collecting a good library for a rural community and has already given three such to rural communities; another reports that a library of forty volumes is sent to each school, read eagerly, and exchanged at the middle of the term.

The Federation member reports effort thruout the state for the objects emphasized by the Patrons Department. "All along the line the health conditions have been improved, drinking-fountains installed, ventilation improved, and critical attention given to the physical side of school life. Many small towns have for the first time made appropriations for examina-

tions of pupils by physicians." Concerning school revenues, "The appropriations have been more liberal for teachers' salaries, which are becoming higher every year, especially in the lower grades and rural schools."

Maryland.—As nearly all organizations interested in education successfully concentrated their efforts on securing a state school attendance law, the usual "unifying function" of the Joint Committee was not needed this year. Concerning social hygiene, it was reported that the "Maryland Society for Social Hygiene is formulating plans for instruction along these lines in the normal schools of the state. They recognize its importance and have under consideration the selection of books that can be recommended, out of the multiplicity now being printed." Concerning school revenue, a report was made of the sources of revenue in the state and the methods of distribution, after study of such excellent authorities as the following: *Reports* of the United States commissioner of education; *Reports* of the state school board of Maryland; *Reports* of the county superintendents of Maryland; *Public Permanent Common School Funds in the United States* (Swift).

This report will be forwarded to the chairman of the Patrons' Department Committee on School Revenue, with thanks, and the wish that a similar one might be received from every state to facilitate the work of the committee. One item is of special interest: "Maryland's appropriation per capita for her school children is smaller than in most states of her wealth and population. In the latest report of the United States commissioner of education it amounted to $24.49 per annum. In one state for the same year it was $6.66, but in another the sum was $59.01. It is but fair to say that our state is gradually increasing its proportion."

The S.A.C.W. investigated education laws and the powers and functions of the state board of education and the county boards. Articles have been sent to county newspapers and exercises held in ten county high schools to arouse interest in higher education.

Massachusetts.—The Massachusetts Joint Committee finds itself in the enviable position of being able to point with pride to the admirable provision already made for many of the school needs which are the problems of most communities less mature educationally. As regards school revenue, the state board of education was authorized a year ago to investigate the question of adequate revenue for school purposes and to report its findings to the legislature of 1913. As regards the health conditions of school children, medical inspection has been compulsory since 1906 thruout the state. Since then the increase of attention to health conditions, and the progress in them, have been steady. The Joint Committee has therefore turned to other work, including vocational training and vocational guidance, particularly of girls, and very particularly the girls of one's own community. A clear and excellent leaflet has been issued. A card catalog is being prepared which in the future will give a fairly complete record of the yearly

activities of the affiliated organizations, and a list of other organizations carrying on similar work.

The member for the Congress of Mothers reports several new parent-teacher associations and affiliated clubs. The appointment of a commissioner has been secured to investigate the advisability of pensioning widowed mothers with minor dependent children, in order that the home may be kept together. Legislation for this is expected next year.

The member for the Council of Jewish Women reports continued work for vocational guidance; for the juvenile court (which was started with their urgent co-operation); immigrant aid. In this great work, the council meets and protects immigrant girls, keeping in touch with them personally until they are self-supporting and safe. Much other help is given, especially in evening classes where English is taught.

Home and school associations have grown at Everett to the number of fourteen, reaching 1,400 parents and teachers; many talks on sex hygiene and other vital matters have been given; truancy has been reduced more than one-half.

Michigan.—The Michigan Joint Committee "devotes its energies to correcting those evils in the school system that are to be dealt with by civic and legislative means." In the legislature of 1911, eleven measures were adopted relating to school improvement which had been urged by the committee, in co-operation with many agencies. Systematic work is being done on a definite program for 1913: the Commission School Board bill, measures for increasing the efficiency of the rural schools, Teachers' Pension bill, and a Textbook bill.

Addresses and printed matter indicating methods of studying the questions involved are presented to interested organizations, as the Federation, the Association of Collegiate Alumnae, the State Teachers' Association, the State Grange, and the Farmers' Institute. Most of the women's organizations have an annual program on education, and many of them an outlined course of study. The chairman pleads particularly for scientific efficiency in school administration, for freedom from politics, for high-class boards that will appoint teachers for their merits and select schoolbooks for their quality.

Minnesota.—Among work reported, especially from the clubs, are many steps toward better health conditions. Programs of district meetings have included entire sessions occupied by physicians and school superintendents discussing the teaching of sex hygiene in schools.

Thru a school census by club volunteers, cases of violation of child-labor laws were detected, also truancy and unreported cases of tuberculosis and other diseases. Hygienic experts were hired by the clubs to inspect the schools of several cities of the state. Their lectures and reports were made public with good results. Visiting nurses have been secured and the funds raised in ways that interested the public in their support.

Mississippi.—Concerning revenue for school purposes, the chairman reports that the last legislature increased the appropriation for agricultural and night schools; it also made an appropriation for $1,200 to defray the traveling expenses of the supervisor of school improvement; it made it legal for counties to operate wagons for transportation to consolidated schools; it appropriated $126,500 for support of the normal college.

For improving health conditions, the state improvement association and the state board of health joined in a "Health Campaign." "Health Day," "Clean-up Day," and "Beautify Day" were observed in a practical way in 2,000 schools. As a result of the campaign more than 500 schools report medical inspection for tuberculosis and hookworm. More than 1,000 rural schools report covered water-coolers and individual drinking-cups. Bulletins on the fly, the mosquito, and on sanitary toilets have been distributed by the thousand. A "Health Placard" on consumption was sent to every school, and the law requires it to be posted in a conspicuous place.

The girls' canning and poultry clubs have been supervised by the school improvement association; this second year finds twelve counties organized, with a membership of 2,816.

The Congress of Mothers' parent-teacher associations are doing excellent work in several towns; they have had women physicians and trained nurses visit these towns and talk to the mothers and teachers on sex hygiene. Rural schools have been improved by getting better roads, better houses, and planting flowers. In the cities they have worked for cleanliness, and fewer flies and mosquitoes. Domestic science has been put in some schools. Legislation has been urged for kindergartens and for a state reformatory.

Missouri.—The work of the Joint Committee as such has been devoted to two fields of study and action:

1. The school revenues of Missouri. A study of these has been made by the member for the Association of Collegiate Alumnae, aided by the St. Louis Branch. It shows (*a*) permanent funds, origin and amount; (*b*) taxes, local rate, etc.; (*c*) state basis of apportionment; (*d*) comparison of Missouri's expenditure per capita for buildings, salaries, and incidentals with that of other states; (*e*) a map showing expenditure for each county in the state. A report is to be printed for distribution and study next year.

2. An effort to have sex hygiene taught in the normal schools of Missouri. A very successful conference was held by the members of the committee and the presidents of the normal schools during the National Education Association meeting of the Department of School Administration, with the result that lectures are to be given on the subject next year; and as soon as feasible regular instruction is to be given in connection with the work in biology. The chairman, at a banquet to visiting normal-school faculty members, was asked to give a toast on "What Women

Want the Normal Schools to Do." She utilized the opportunity to call attention to the need for better teaching of hygiene, including sex hygiene. The reality of the need was recognized heartily. The outlook is promising, and Missouri hopes to have much to report in this direction next year.

For the educational work of the Missouri Federation see the General Federation Education Report.

The Congress of Mothers, at the request of the dean of the Department of Education of the State University, presented before the Superintendents' Section the subject of practical co-operation of parents and teachers; also aided in preparing a bulletin on the aims, methods, and results of parent-teacher associations, which is to be sent to every city and county superintendent in the state. In St. Louis, 1,000 mothers have been taught the value of closer co-operation between home and school. In Kansas City, thru the Public Welfare Board's work in fourteen school social centers, the congress has brought the same thought to parents, both men and women. A parent-teacher society induced the board of education to print thousands of circulars on the proper care and diet of school children; these were distributed to the parents.

Montana.—In regard to school revenue, the chairman of the Joint Committee reports that Montana is in an enviable position. "The public schools are supplied by taxation and have a rich endowment, in the two sections of land in each township—the school lands were originally about five million acres. A small portion of the land has been sold—the greater part of the school land is leased, and a large income is derived from the rentals."

Rural schools have heating and ventilating systems installed, and nearly all schools in one city have sanitary fountains. A state law requires instruction concerning communicable diseases.

The member for the Association of Collegiate Alumnae reports that thru certain women's organizations various schoolhouses have been opened in the evening for lectures on vital subjects. The superintendent of schools in one of the cities has suggested the appointment of visiting committees of ladies, to bring about more active co-operation between parents and teachers.

Nebraska.—Work reported only by the Federation representative. To improve health conditions of school children the following things are done: Each club provides a "Health Day" program in schools. Local doctors give short talks to children on tuberculosis, emergencies, germ diseases, evils of drinking-cups, danger of flies, care of babies, clean food, or dental hygiene. All clubs are working for medical inspection; five have accomplished it this year. Sanitary fountains have been installed by club women in the schools of fourteen towns.

Ohio.—The Ohio Joint Committee has devoted its first year to investigation concerning the work already being done by women's organizations,

that duplication might be avoided. Letters making this inquiry were sent to eighty superintendents of schools. Twenty-eight responded; 22 reported co-operation in greater or less degree; 4 reported none at all. Correspondence was opened with the state commissioner of schools, and with the Ohio School Improvement Association, which was successful in having passed the minimum salary law for teachers. As a result of this study of the field, the committee plans next year to unite with the School Improvement Association and all women's organizations in the effort to improve rural schools, to secure a normal course for teachers in sex hygiene, to establish social centers, and continuation schools giving industrial and vocational education.

The Council of Jewish Women has four sections in Ohio, and in its four sections it has secured medical inspection in public schools, school nurses, vacation schools, penny lunches, has superintended the meals given anæmic children in the open-air schools, has initiated and co-operated in a safe and sane Fourth of July celebration, established mothers' clubs of immigrant mothers, a kindergarten in a congested immigrant quarter, monthly lectures on health and hygiene, opened classes in English and night schools for teaching English to immigrant men.

The Association of Collegiate Alumnae reports that one branch has formed a Home and School Association with eight or nine district parent-teacher organizations. Another branch has decided to emphasize vocational work for girls.

Oregon.—The past year has been devoted more to study than to executive work (see full reports of last year and the year before). The needs of the rural schools have received most attention and an attempt to reach them has been made thru the state grange.

Pennsylvania.—See the report of the General Federation Education Department for report of the Pennsylvania Educational Alliance, which affords sufficient means for concerted action in the state. While it obviates the need of any additional unifying agency in Pennsylvania, it admirably demonstrates the usefulness of such unification.

Rhode Island.—Reports were received from three of the affiliated organizations. For that of the Federation see the summary of Federation reports.

The Council of Jewish Women of Providence has started an industrial department in one of the primary schools there, all supplies being bought by the council; the girls are taught domestic science, from sewing to practical housekeeping; the boys are taught chair-caning and hammock-making, among other things, also to sew on their own buttons! Outside work is taken in and the proceeds used to purchase additional material.

The Association of Collegiate Alumnae is continuing to arouse interest in college education by offering certain prizes and bringing the girls in contact with college women and ideals. It helps toward scholarships, toward legislation, and toward playgrounds and school gardens. At New-

port the work of the medical inspector has recently been aided by the services of a school nurse (provided by the school authorities at the instance of the board of health) who follows up his work by personal visits in the homes. Free dental examination has been provided for and will probably soon be in operation.

Texas.—The Texas Joint Committee during the year 1911–12 has directed its efforts for the following objects, which will be the objects of continued labor in the coming year: compulsory education; professional county supervision and county boards of education; the establishment of rural high schools and the extension of the rural-school term; removal of tax limitation for the support of public schools thru constitutional amendment; a six years' term for governing boards of educational institutions; majority rule instead of two-thirds rule in school tax elections in independent school districts; adequate and permanent financial support of the higher institutions of learning; the wider use of the school plant; for the construction of scientifically lighted, ventilated, and heated school buildings; for attractive school grounds, equipped with playground apparatus; physical examinations of school children; abolishment of the public drinking-cup; instructions in personal and sex hygiene in normal schools; for the inclusion of manual training, domestic science, domestic art, and agriculture in the school curricula; for the special teachers for backward children; a custodial institution for feeble-minded children, and kindergartens.

Utah.—"A healthy, live committee" has been meeting thruout the year, and working for improved health conditions for school children. It has had hot cocoa served, to supplement the cold luncheons, at one district school, and plans to extend the service to another next year. It provided sanitary paper towels for a month at a city school and hopes all the school authorities will be convinced of their superiority soon, as some are now. An open-air school for anæmic children was projected. The committee, with one from the Federation, completed arrangements to do their allotted part; namely, provide transportation for the children, three meals during the school day, Eskimo garments, the matron, and the cots upon which the children should take their naps. The school authorities were to provide the building accommodations, teacher, and usual school implements; unfortunately they decided that they were unable to do so for lack of funds for the building.

Among school improvements, a noteworthy one concerns revenue. A constitutional provision of half-mill state tax, providing annually $100,000 which is available for the high schools of the state, in addition to their usual income, became effective this year. Others insure a high standard of preparation for teachers, and a state high-school inspector reporting to the state board of education. Salt Lake City has an admirably developed department for atypical children—the first mentioned officially west of Chicago.

Virginia.—The Joint Committee worked, among other things, for the Virginia Woman's College, endeavoring to induce the legislature to establish a co-ordinate college at the University of Virginia. The bill was defeated, but the idea is not abandoned.

The member for the S.A.C.W. reports work for the establishment of a free circulating library. Thru the state board of charities an appropriation for a school for exceptional or defective children has been secured. The work last year was specially for medical inspection of public-school children, and this has advanced rapidly, with a trained nurse in appointment and a physician in charge for each school.

Washington.—See report of Joint Investigation of the Teaching of Personal and Sex Hygiene in the Normal Schools.

The Association of Collegiate Alumnae is establishing scholarsh p funds, and aiding in a library and high school. They are urging the institution of medical inspection.

West Virginia.—The question of revenue for school purposes has been greatly improved in the last four years. Local conditions have been carefully studied, made public, and consequently improved. Medical inspection, recently established, has been the object of effort, and is now aided by "follow-up" measures with parents. Special concern is felt for improvement of rural schools and careful attention given to teachers preparing for that field.

The object of the Department of School Patrons is fourfold:

First, to ascertain from highest educational authorities the needs of the schools and approved methods of meeting them.

Second, to transmit this educational message systematically to strong volunteer organizations, national and state and local, which can do tremendous good by such directed and united effort.

Third, to provide a simple means of giving unity and continuity to state work thru its state joint committees, which comprise one state member for each affiliated organization and members-at-large representing strong state or local associations.

Fourth, to collect in convenient form, for mutual suggestion and encouragement, brief statements of co-operative work accomplished or under way. Most important undertakings require the concerted effort of the entire community. When possible to segregate the work of individual organizations from general results in accordance with reports sent in, specific credit has been given.

OUTSIDE CO-OPERATION WITH PUBLIC SCHOOLS

WILLIAM H. ALLEN, DIRECTOR OF THE BUREAU OF MUNICIPAL RESEARCH AND THE TRAINING SCHOOL FOR PUBLIC SERVICE, NEW YORK, N.Y.

[*Abstract*]

The most complete index to opportunities for public service is furnished by the needs-not-yet-met in public schools. Had those familiar with school needs been consulted by the private philanthropists who have given away an average of $120,000,000 a year for the last ten years, the history of philanthropy, of education, and of government would have been quite different. There is really nothing about a will-maker or donor, philanthropist or taxpayer that makes him prefer to give money to help 1 per cent rather than 100 per cent of the children of his city or to prefer correction to prevention, or deficient to normal children.

In only 4 of 142 cities whose local school needs that cannot now be met by taxes were recently reported to the New York Bureau of Municipal Research, have will-makers remembered the public schools. Yet these 142 cities mention buildings, equipment, and services beyond the present willingness or power of taxpayers that would cost $3,000,000 plus the income on $7,500,000 for maintenance.

Neither school men nor communities have as yet generally begun to list ways in which citizens can help the schools. Nobody has seriously tried to picture the possibilities of co-operation between philanthropy and public schools on a national scale—excepting, of course, four notable services still on too limited a scale: the child hygiene division of the Russell Sage Foundation, the General Education Board's promotion of high schools in the South, the propaganda by the National Association for Promoting Industrial Education, and the co-operative Efficient Citizenship bulletins by the New York Bureau of Municipal Research.

Returns from 142 city superintendents show:

1. Superintendents when they stop to summarize find long lists of new buildings, new equipment, and new services which they feel their general publics are not yet prepared to furnish but which their children sadly need.

2. American school boards and taxpayers learn more readily from local demonstrations than from reported experience of other school systems; hence the need of private initiative in demonstrating advantages or disadvantages of proposals.

3. Many cities are suffering for want of school facilities which smaller and poorer cities are providing from taxes.

4. Many school needs must be met at first by effort outside of schools rather than by outside gifts to schools.

5. The best available index to help needed outside of schools is the list of needs disclosed within schools.

6. Superintendents have not thus far generally thought of wills and private gifts as potential assets for public schools; in only 4 of the 142 cities they reported that will-makers remembered the public schools.

7. Givers have thus far overlooked their opportunity to help, without hurting, thru gifts to and for public schools.

8. Private giving is apt to paralyze public responsibility unless private gifts are confined to purposes "not possible thru revenue obtained from ordinary channels."

9. The school report's opportunity to show school needs so as to enlist private giving and public support has not yet been used.

Listing needs is the first step in securing outside help. School men and philanthropists, including taxpayers, will act upon one another's suggestions in proportion to the definiteness and continuity of the opportunities suggested by one to the other.

When on May 17, 1912, representatives of over 150 distinct New York City agencies, private and semi-public, met in a conference on outside co-operation with public schools, everyone was surprised with the help that was available to schools. No less than a million dollars a year is being spent annually by citizens of New York in co-operation with public schools. It is felt that many times that amount is available if the school officials will tell where help is most needed.

In the report by the Bureau of Municipal Research which led to the conference, it was shown that New York school documents had not heretofore shown opportunities or needs for civic co-operation. Whenever outside assistance is mentioned, suggestions have not been given as to how it might be increased or made more available. Allied educational institutions have been mentioned, but openings for extended connections with schools have not been outlined. Many agencies report lack of encouragement, difficulties encountered, in their efforts to co-operate, or undue delay in extending their co-operation. In the conference just mentioned, President Winthrop suggested that the board of education wished co-operation and would be glad to make special effort to meet outside individuals and agencies more than half way.

Another defect in most cities is that outside agencies wishing to work with and for the schools have not co-ordinated their work. They are apt to duplicate and overlap. Organizations with the same problem are less forceful for want of co-operation. Seldom have agencies outlined either for themselves or for the public 100 per cent of the work which ought to be done along the lines in which they are interested.

The results of a comprehensive study by Miss Elsa Dennison, for the Bureau of Municipal Research, on outside help for the schools, as described by 350 city superintendents and 700 men and women, are now in press and will be available in book form next October. The book will be called *Helping School Children*. The division of school patrons can do little that would help so much as to interest local school superintendents in their interim and annual reports to stimulate and guide outside co-operation:

a) By giving adequate, specific credit and acknowledgment to all co-operating agencies

b) By stating the number and character of communications received during the year from outside agencies and individuals by the school authorities

c) By explaining why important suggestions on which outside agencies may have spent time and money and public attention were found impracticable

d) By frankly showing how outside agencies might change their mode of co-operation so that the schools might make more use of it

e) By mentioning lists of definite school needs which might be met by outside interest

f) By noting the approximate cost in time and money of such co-operation

g) By using photographs and charts in school reports which will show types of school activity fostered by outside agencies, or needed and not yet available in the schools

h) By noting especially "educational" or "pedagogical" or other "scientific" questions respecting which the school authorities would like the advice of acknowledged experts, such as college professors in psychology and school administration, dentists, physicians, architects, etc.

i) By reporting to principals, newspapers, and the public, especially thruout the summer and early fall, and as they happen, new developments, gifts, and manifestations of outside co-operation given or lacking.

While making social centers of schools will increase gifts to and for schools, a change in the attitude of givers, which will include school decorations, school grounds, scientific study of school problems, educational experiments, etc., will multiply the reasons for making social centers of school buildings.

When school needs are listed, working thru schools will be recognized as more important than working apart from schools.

CIVIC AND SOCIAL CENTER DEVELOPMENT

EDWARD J. WARD, UNIVERSITY OF WISCONSIN, MADISON, WIS.

"Liar!" "Thief!" "Robber!" "Toot-toot!"

From the brawling and the rough-house of the party convention that met in this city a month ago, we must not in disgust turn away. We must not ignore it nor shut our eyes to its meaning. That kind of eruption upon the political face of America is a symptom of disease underneath. This wild hoodlum noise is not peculiar to Republicans. It is just as common among Democrats. It is the result of the disease of political partition.

When men retain their citizenship, and look at public questions without partisan bias, then they keep their heads. When men become partisan, when they give over their prerogative of looking at every side of public questions, then in their political activities they lose their heads.

Men talk of a new alignment of parties, the present division having become meaningless, and it is suggested that the new line-up be Progressive versus Conservative. In a few years this means confusion, when the young men who would be the progressives become old and conservative.

Our problems are too complex to be solved by party division, they demand conference. The time has come to effect the comprehensive organization of the citizenship, not into divisions which make us easy to boss, but into one body, to look out for the common interest. The school-

house is the means by which we can get together, not only to vote upon public questions, but by which we may gather to deliberate and to develop capacity for controlling wisely the common business. The public school building in every neighborhood in America stands inviting its use by the citizens as a common council chamber, a place for the organization of the final legislative body, the ultimate Supreme Court, the single political deliberative organization of the citizenship.

When every schoolhouse is used by the adults of its neighborhood as a political headquarters, then every schoolhouse will come to be naturally and spontaneously a complete social center—a gathering-place not only for the little children, as it is now a nursery for the neighborhood, but a gathering-place for the young men and young women in training for citizenship and in such wholesome association as will promise wiser marriages hereafter, and so a gathering-place of the whole community, a heart and hearth of the neighborhood household spirit, a place wherein democracy may find a stronghold and a home.

The first logical step is being taken in many cities in the location of the polling-place, the voting headquarters, in the schoolhouse. The next step is the organization of the neighborhood body of the electorate which now is bound together in each voting district by the responsibility for deciding public questions, into a single body for deliberation upon public questions.

This is no new proposition.

At the corner of the college campus at Ripon, Wis., stands a little frame schoolhouse. It does not look as old as it is, for when it was moved from its original location down town, it was carefully repaired and freshly painted. Upon the front of the building are these words:

THE BIRTHPLACE OF THE REPUBLICAN PARTY

IN THIS SCHOOLHOUSE, MARCH 20, 1854,
WAS HELD THE FIRST MASS-MEETING
IN THIS COUNTRY THAT DEFINITELY AND
POSITIVELY CUT LOOSE FROM THE OLD
PARTIES AND ADVOCATED A NEW PARTY
UNDER THE NAME REPUBLICAN

Standing on its porch, Mrs. Silas Evans, wife of the president of Ripon College, said:

> My husband has made what I regard as a good suggestion. It is that there be painted under that legend the words: "Ye must be born again."

If one were to paraphrase the question of Nicodemus by asking, "Shall citizens of all parties gather again in schoolhouses as those Whigs, Free Soilers, Democrats, and miscellaneous others did that night, to discuss the problems of our time and to form a new political party?" the answer would be—.

On the evening of November 1, 1907, in the city of Rochester, N.Y., twelve men of various views, creeds, and incomes came together in the schoolhouse in their district, and inaugurated a movement, not to form a new party, that is, to create another division of citizens; they did something more important, they created for their community a new institution of democracy.

The members of every public body which has questions to decide and appointments to make—that is, of every public body except the highest—have a building, maintained at public expense, in which to meet for deliberation and at public expense; they have provision for the all-sided presentation and discussion of the questions and appointments at issue before they render their decisions. The national congressmen have the capitol and a staff to look after dockets, records, etc.; the legislators have the state house with their secretarial functionaries; the aldermen or commissioners have the city hall and the service of a clerk; judges have a courthouse in which provision is made at public expense for deliberation and discussion, before decision is rendered.

In all these subordinate public bodies, the ballot box is never found alone. It is always accompanied, as a matter of course, by the forum. Congressmen, state legislators, aldermen have access to the newspapers and other private sources of information, but in order to render intelligent decisions it is recognized that there must be publicly provided opportunity for counsel together.

Only the citizenship, the highest authority in this country, is without public provision for all-sided presentation and discussion of questions to be decided and appointments to be made, and this in spite of the fact that, whereas the delegated bodies are made up of men presumably selected for intelligence upon public matters, the citizenship includes all of us, and in spite of the fact that the strongest tendency today is to increase the number and importance of the questions which must be directly decided by the citizenship.

These men who gathered in that Rochester schoolhouse that night would have done nothing new if they had merely recognized the fundamental importance of an intelligent citizenship in a democracy. Men were doing that before Washington said, "In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened." Nor would they have made any contribution to the American problem if they had hopelessly said with President Taft that, having no adequate machinery for the formation of intelligent public opinion, the citizenship is incompetent for judging upon the merits, and reviewing the decisions of its creatures. Nor did they merely advocate the establishment of such deliberative machinery for the use of other people, as any constructive political student or reformer might, quoting such words as those of John Stuart Mill:

Where this School of Public Spirit does not exist, scarcely any sense is entertained that private persons owe any duties to society except to obey and submit. There is no unselfish sentiment of identification with the public. Every thought and feeling, either of interest or of duty, is absorbed in the individual or in the family. The man never thinks of any collective interest, of any objects to be purchased jointly with others, but only in competition with them and in some measure at their expense. A neighbor, not being an ally nor an associate, is therefore only a rival.

They there, for their own district, constructed such a machine of democracy, organized such a school of public spirit. They established alongside the civic instrument of decision—the ballot box—and upon the same all-inclusive public basis, the civic instrument of deliberation—the open forum.

When aldermen, legislators, or other civic agents come together, they form an organization which includes them all, elect officers, and establish rules of procedure.

So these men there formed an organization including as members the citizenship of the community. They elected, as president, a well-to-do physician, a conservative Republican elder in a Presbyterian church; as vice-president, a Jewish tailor, an avowed Socialist; as secretary, a union printer; as treasurer (to handle money collected for banquets and other extra-civic affairs), a director in several banks in the city. There were, of course, no dues, for the members paid their dues when they paid their taxes. They decided to meet weekly in the schoolhouse. As to programs, the first part of each evening was to be devoted to an address upon some question of public interest, the remainder of the evening to the discussion of the topic in five-minutes speeches from the floor. As to limiting the discussion to politics, and barring religion, this suggestion was voted down, because it was felt that such prohibition would make religious discussion attractive, that, moreover, there were so many questions that can be decided that there would be no time for those which cannot. They decided to begin near home with the first topic. The commission plan of city government was suggested and this led to the question: "What is an alderman for—the alderman of this ward, for instance?" It was decided to invite the alderman to come and speak on "The Duties of an Alderman" at the first meeting after organization.

Now these men were not civic enthusiasts. They were just ordinary citizens, with the usual degree of public interest. They were willing, indeed glad, to come to meetings and listen and talk, but they wouldn't have been any more willing to do the detail errand-boy work of publicity, securing speakers, and arranging for the convenient use of the meeting-place, than aldermen or legislators would be willing to take care of the clerical work of their assembling. These citizens had at their service a community secretary, otherwise called a social center director, whose salary was paid out of a public appropriation.

At the next meeting there were something over fifty men present,

The alderman told what he thought he was supposed to do. Then in five-minutes speeches, those who had any ideas on the subject told what they thought about it, and at the close they gave the alderman a chance to answer questions and sum up the discussion. Then they gave him a vote of thanks. His response was significant of the fact that not only the citizens themselves but their servants need and welcome such comprehensive civic organization for political deliberation:

> You have given me a vote of thanks. I want to give you a vote of thanks, and to say that if every member of the common council and every other public servant had frequently such opportunities as this, to come before the people whom he is supposed to represent and discuss with them the things in which he is supposed to represent them it would mean that we would have a more intelligent city government.

At the next meeting the man who was drafting the new city charter was invited to come and talk it over. The attendance increased.

The next week a request came from the citizens in another part of the city for the services of the civic secretary, and they asked to have their neighborhood public building, the schoolhouse, opened for use as a citizens' common council chamber.

Within another month came a similar request from a third district. By the end of the year there were twelve schoolhouses being used as neighborhood centers of democratic deliberation, as public forums.

With the opening of the fall of 1908, the work of the community secretary (who was, of course, to blame if interesting programs were not arranged) became easy. A presidential campaign was on and there was no difficulty in finding speakers and topics of live, immediate interest. The merits of Taft and Bryan, the claims of the Socialists and the Prohibitionists were presented, sometimes successive evenings being devoted to their respective champions, sometimes the several conflicting arguments being presented together in debate. Candidates for various offices were invited to appear for a "threefold purpose," as the successful aspirant for a local office said:

> First, that the voters may see what sort of men we are who seek office; second, that we may tell what has been the history of our relation to the ward we seek to represent; third, that we may tell what we mean to do if elected.

During the second year sixteen schoolhouses came to be used by the citizenship for the many-sided consideration of all sorts of matters of common interest and at the end of this season it was decided to invite Justice (then Governor) Hughes to speak at the anniversary banquet and celebration. A delegation visited him with an invitation. He responded that he could not and would not visit the city at that time, whereupon the citizens decided not to depend upon representation, but to give direct expression to their desire. A letter was drafted and signed by some fifteen hundred active "members" of neighborhood clubs. Governor Hughes responded, "I cannot bring myself to refuse an invitation of such an unusual character," and he came. He said it was the only time he was forced to break his word

while in office. His perception of the significance of this movement was expressed in the words, "I am more interested in what you are doing and what it stands for, than in anything else in the world. You are buttressing the foundations of democracy."

Among the invited visitors and speakers before these citizenship assemblies in the schoolhouses was a senator from Wisconsin. There had developed many other uses of the school buildings as community or social centers. For instance, young people's clubs, modeled upon those of the adults, and called Coming Civic Clubs, had been formed (not of school children but of youths beyond school age and not yet twenty-one); some of the buildings had been equipped with gymnasium outfits and baths for use in the evening; libraries and reading-room facilities had been installed, and some buildings opened six evenings each week and (upon the request of the Ministers' Association) on Sunday afternoon; a public-lecture system, modeled upon that developed under Dr. Leipziger in New York, but differing in the fact that the citizens had a voice in the selection of the topics, had been developed; a beginning had been made in the use of the schoolhouses as motion-picture theaters; thru co-operation with Dr. Goler a start had been made in the use of the schoolhouse as a local health office; a neighborhood dental office had been established in one building; a successful art exhibit had been arranged using the schoolhouse as an art gallery, and, indeed, the economy of focusing a dozen sorts of public service thru the wider use of the schoolhouses has been demonstrated; but the basis of the institution was, in every case, the use of the building as a center for free all-sided deliberation upon public questions, a community headquarters of a self-informing, conscious democracy. This was, of course, the feature which attracted the attention of the Badger senator, who spoke of it in these words:

> This continued civic expression is a miracle in New York state. It has no relation to its environment. It is manna which, in this political wilderness, tastes good and is undoubtedly nourishing, but I have doubt about its lasting. Now if this had appeared anywhere in the West, especially in Wisconsin, it would not be miraculous manna, it would be a crop growing naturally out of the ground, and it would last. It fits in with the Wisconsin idea.

He carried the news of Rochester's experience back to his home state. Dean Louis E. Reber, of the Extension Division of the University of Wisconsin, the part which regards the state as the university campus and the population of the state as the university student body, at once recognized that the use of each schoolhouse in the state as a local center of democratic discussion and of other community self-educational and self-serving activities would facilitate the benefit of the university to its owners. He recommended the establishment of a Bureau of Civic and Social Center Development which would put at the service of the various communities information regarding successful methods of organization, equipment, etc., in this movement "for the citizens to get their money's worth out of their own property."

At the next session of the state legislature a bill was introduced, not so much to force unwilling boards of education or superintendents to permit the citizens to use their buildings during times when they would otherwise be idle (school boards and superintendents are quick to recognize the improved architecture, better equipment, and increased support for the regular school which always results from adult use of the schoolhouses), as to define the right of the organized electorate to the use of public property for deliberation upon public questions at public expense on exactly the same basis that provision is made for the decision of public questions by the citizens at elections.

As soon as the fact was understood that this simply puts back of the citizens' decision at the ballot box the opportunity for that discussion which subordinate public bodies always have before they are required to decide any matter, it became a law in Wisconsin that the school board or other department having charge of public property which is capable of being used as a public forum shall provide for free and gratuitous use of such property as often as once a week. This law permits school boards and other public bodies to provide at their discretion for recreational and wider educational activities of various kinds, but it requires them to provide for public forums.

Another man who became interested in the social center idea as it was developed in Rochester was Dr. W. D. P. Bliss, who, as a special investigator under the Department of Commerce and Labor, visited that city and spoke at several of the centers. He told Mrs. David Kirk of Pittsburgh of the movement. She had been a superintendent of schools and at once recognized the great undeveloped resources in this field. With the co-operation of Mrs. Francis Vandergrift of Pittsburgh, she offered to help finance a national conference upon civic and social center development to be held at Madison under the auspices of the University Extension Division. The offer was accepted, a program was arranged for three days of last October, and a call issued.

The attendance at this meeting was beyond all expectations remarkable. In the previous February there had been a conference upon the subject held at Dallas, Tex., financed by Frank Holland, publisher of *Farm and Ranch*, who had sought to have the University of Texas follow the example of the University of Wisconsin in establishing a Bureau of Social Center Development, and, upon learning that the University of Texas, while indorsing the idea, was at the time without funds, had put into the field a remarkable civic organization promoter in the person of Charles W. Holman. It was, therefore, known that the Southwest was familiar with the idea of community organization and social center development, but it was not only a matter of surprise, but a demonstration of the fact that the chief social currents are today not centrifugal but centripetal, that men and women came to this meeting at Madison from California and Washington, from South Carolina and Massachusetts, and nearly all the states between.

The whole subject of social center development in its various phases was considered. Dean Walter T. Sumner put behind the demand that the schoolhouses be opened for wholesome recreation the challenge of the Chicago Vice Commission's report; Herbert Quick and P. V. Collins urged social center development for rural communities as an absolute necessity for the nation's health; John Collier, of the National Board of Censorship of Motion Pictures, said the failure to use the schoolhouse as a motion-picture theater is the mark of unbelievable public stupidity; Mrs. M. F. Johnston told of the remarkable development in Richmond, Ind., where the schoolhouse is a neighborhood art gallery and a center of democratic musical expression; Charles McLenegan pointed out the economy of the use of the schoolhouse as a branch library and Drs. John R. Commons and Charles McCarthy told how this neighborhood librarian's desk might serve as a branch employment office and legislative reference bureau; and Dr. George B. Young, the new health officer of Chicago, pictured the use of the schoolhouse as a local health office. Indeed, by this analysis was shown how very many things are included in this institution of which Dr. Josiah Strong said, "The social center represents all the people in all the things that are common to all."

But the great point of reiterated emphasis thruout the whole conference was not the increased enjoyment or culture or health that shall come thru developing these resources in the wider use of the schoolhouse as a community center; it was the obvious need and feasibility of making every schoolhouse in America a center of self-informing, self-expressing democracy.

Doesn't the press meet the need? Richard Lloyd Jones, formerly of *Colliers;* William Allen White, of the *Emporia Gazette;* Frank Parker Stockbridge, formerly of the *Cincinnati Times Star;* Livy S. Richard, of the *Boston Common;* Louis F. Post, of the *Public,* and Dante Barton, of the *Kansas City Star,* all at this meeting agreed that, great as is the service of the press, it cannot furnish the elbow-rub and the hand-hold of democracy. As one of them said:

> The more I see of newspapers, the more I like the idea of the organization of the electorate to use the schoolhouses for man-to-man, first-hand political discussion.

A unique and dramatic incident illustrating the character of the social center as the common ground was given at the closing banquet of this convention. Between courses songs were sung. One of them began:

> There are several parties in this community,
> Republican and Democrat and Socialist, that's three;
> We never got together just because we disagree,
> But there's a place where all of us can talk things over free.
>
> It's at the center,
> The social center,
> The place where everybody feels at home,
> Forgets the external,
> Becomes fraternal,
> And knows the time for friendliness has come.

At the end of this verse, the music was stopped and the spotlight was thrown upon the speakers' table. There, sitting side by side, just as tho they had something in common, were J. W. Howes, Republican mayor of Prescott, Joseph Schubert, Democratic mayor of Madison, and Emil Seidel, Socialist mayor of Milwaukee. And indeed they showed that they had much in common when, in response to the toast, "Who Needs the Social Center Most? The Mayor!" each expressed the benefit that the public official may derive from the opportunity to meet the organized electorate in frequent conference assembled.

But the great sure prophecy of the national sweep of this movement came in the indorsement of Senators Pomerane, of Ohio, and Clapp, of Minnesota, of President Herbert Bigelow, of the Ohio Constitutional Convention, of Governors Stubbs, of Kansas, and McGovern, of Wisconsin, and especially in the address of Governor Wilson, of New Jersey, who expressed the common thought of all these men when he said:

> It seems to me what is going to be produced by this movement—not all at once, by slow and tedious stages, no doubt, but nevertheless very certainly in the end—is, in the first place, a release of common forces now undiscovered, now somewhere banked up and now somewhere unavailable, the removal of barriers to the common understanding, the opening of mind to mind, the clarification of the air, and the release in that clarified air of forces that can live in it; and just so certainly as you release those forces you make easier the fundamental problem of modern society, which is the problem of accommodating the various interests in modern society to one another.

A year ago the National Education Association, at its annual convention at San Francisco, passed unanimously a resolution indorsing the idea that the schoolhouses should be equipped, manned, and opened as community centers. At the recent meeting of the Department of Superintendence at St. Louis, the enthusiastic indorsement of this movement by these men was shown in the fact that the topic "The Schoolhouse as the Civic and Social Center of the Community" was placed on the program of the central session of the convention. This approval of school men is significant, for they are a conservative body, and if the demonstrations made in the hundred cities and towns in which the social center movement has begun had not shown that the plan works out as well as it sounds, it would have to go ahead without their co-operation.

The hardest jolt that we Americans have recently received reminding us that there are problems which must be solved either by brains or bombs, debate or dynamite, was the Los Angeles uncovering.

Everywhere citizens are beginning to feel the need of a civic common ground. But in Los Angeles they see it plainly. Joseph Scott was a member of the counsel in the McNamara case. Soon after the confession, in an address at a great meeting in the auditorium, he pointed out that the problem of industrial control is the problem of this century, than which there is only one greater; and this greater problem is whether, in the solution of the economic question, we shall preserve our basic sense of civic

unity, our fundamental common good will. "And," said he, "the right solution of this greater problen lies chiefly in our common use of this community institution—the schoolhouse."

There are two bright spots in the story of the Los Angeles excitement: one was the satisfactory demonstration that the schoolhouse may well and economically be used as a polling-place; the other was the demonstration of what has been found and is being found in other places, that even such an interesting meeting as that between "Good Government" and Socialist champions becomes surprisingly human and fair when it is held under the auspices of a community organization of the whole citizenship in a common schoolhouse.

The experience of various communities thruout the country bears out the statement of Professor George M. Forbes, president of the Rochester Board of Education: "It means that our school buildings, consecrated to education, may become the instrument of that deepest and most fundamental education upon which the very existence of democracy depends, as headquarters for an organization in which every narrower interest of sect or party or class is swallowed up in the consciousness that the interests of the whole community are supreme."

DISCUSSION

Helen M. Hefferan, National Congress of Mothers, Chicago, Ill.—One of the aims of the Department of School Patrons is to secure more revenue for the public schools. The subject of school revenue is usually considered too dry to call forth an audience. But we intend to keep working upon this subject until we arouse a general interest.

Luther Halsey Gulick, director of the Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.—The co-operation of the community with the school is even more complex than Mr. Allen's brilliancy would make it appear. Voluntary agencies sometimes are meddlesome and take up much time in seeking the introduction of fads. It is the business of the city to put the best man to be found in authority and it is also the business of the city to back this man up. Voluntary agencies do not represent expert knowledge, and on technical questions volunteer bodies should be very humble. I can name schools greatly hindered by so-called "helpful" agencies. These bodies have their place in representing public opinion, and those in authority cannot afford to isolate themselves from the public. I know of an educator who does not care what the public thinks. He says that he is concerned with the "education of the child." He illustrates the idea some teachers have of teaching as isolated from the interests of the public.

Mrs. O. Shepard Barnum, principal of Cumnock School, Los Angeles, Cal.—One of the reasons why the Department of School Patrons was welcomed in the National Education Association was to meet this problem. It is the effort of the department to guide volunteer work so that interfering, spasmodic efforts shall not reach the schools. This purpose is printed on the back of our program and is as follows:

The purpose of the Patrons' Department is to ascertain yearly from educational authorities the greatest needs of the schools and the best methods of meeting them; to transmit this professional guidance systematically to strong volunteer organizations in

every state and city; thus to unify and stimulate co-operative work, until every school receives the active, sympathetic support of every community.

We wish to find out what the school people want. We wish, always, to co-operate, and never to criticize.

EDWARD J. WARD, University of Wisconsin, Madison, Wis.—Dr. Gulick talked "mighty good stuff" when he spoke of interference. We are too paternalistic. We must be democratic. At present very few school principals serve as election clerks. This should be changed and we should shift the voting center into the schoolhouse. The money saved by such a plan would put social experts at the service of each neighborhood.

WILLIAM H. ALLEN, director of Bureau of Municipal Research, New York, N.Y.—Nothing is quite so undemocratic as being loved by people who do not understand you. We can't get democracy on that basis. It is a mistake to think we should not accept gifts for good work. We can spiritualize money, put it to interest and affect 500,000 children. Who is to say I am not to do this? If Mr. Ward thinks he can get a democracy in this country which will not let Mrs. Sage contribute money to alleviate millions of children, he is mistaken in regard to his idea of democracy, in regard to neighborliness. You can't have democracy where you do not have information. The only democracy is one of knowledge. Money will produce the facts. Money will circulate the facts.

AZILE B. REYNOLDS, principal of Armstrong School, Chicago, Ill.—In closing the discussion on a subject presented by men and women of national and city-wide experience, anything I can say will be of value only because of the more intimate view that a neighborhood experience can give.

If civic education is the adjustment of all social relationships, let us consider a neighborhood center that shows the constructive power of philanthropy, which finances a school center, and proves its value as a department of education; that redevelops neighborliness in a community where homes have been isolated by the encroachment of city evils: factories, hotels, and vicious resorts; that brings all members of a family together engaged in the same social recreation; that causes sixteen nationalities to work together for one end and that the common good; that induces a politician and a saloon-keeper to forget loss of power and money brought about in the interests of a center and work for the growth of that center; that draws together in its development the rich and the poor, the great and the small, the voter and the office-holder, the Catholic, the Jew, and the Protestant, the social leader and the social outcast; that awakens the initiative in neighborhood improvement and stimulates the members of other communities to organize for neighborhood education and expression—surely such a center has been a factor in civic education typical of the sort needed thruout any democracy.

The greatest of all material gifts is promised to the meek. Does that mean that when we have come together, argued out our differences, fought out our fights, laid aside the arrogance of power, and so realized our brotherhood and common heritage that we can live in harmony, we "shall inherit the earth and the fullness thereof"? If it does, and I believe it does, then even a neighborhood experience may point the way to our inheritance.

DEPARTMENT OF RURAL AND AGRICULTURAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Benjamin M. Davis, professor, Miami University.....Oxford, Ohio
Vice-President—Cyril A. Stebbins, University of California.....Berkeley, Cal.
Secretary—Ernest E. Balcomb, State Normal and Industrial College .....Greensboro, N.C.

FIRST SESSION—Monday Forenoon, July 8, 1912

The meeting was called to order at 9:30 A.M. in the Banquet Room of the Auditorium Hotel, Chicago, Ill., by President Davis.

The minutes of the last meeting were read and approved.

The president announced that at a called meeting of the department in St. Louis at the Planters Hotel, in February, during the meeting of the Department of Superintendence, it was decided that it would be to the advantage of the Department of Rural and Agricultural Education to hold a midyear meeting in connection with the Department of Superintendence. At this meeting, a motion was made and carried that the president of the Department of Rural and Agricultural Education be instructed to appear before the Board of Directors of the National Education Association and request that arrangements be made permitting a meeting of this department at the midyear meeting of the Department of Superintendence.

Philander P. Claxton, United States commissioner of education, Washington, D.C., being absent, E. T. Fairchild, state superintendent of public instruction, Topeka, Kans., presented a paper on "The Plans of the Special Committee of the National Education Association on Rural Education."

This paper was followed by an address on "The Betterment of Rural Schools thru Agriculture: the Ohio Plan," by F. W. Miller, state commissioner of education, Columbus, Ohio.

James E. Delzell, state superintendent of public instruction, Lincoln, Nebr., then gave an address entitled "The Betterment of Rural Schools thru Boys' and Girls' Clubs: the Nebraska Plan."

A paper on "The Work of the National Committee on Agricultural Education" was then read by the chairman of the committee, Homer H. Seerley, president of Iowa State Teachers College, Cedar Falls, Iowa.

This was followed by a short address by S. B. McCready, Ontario Agricultural College, Guelph, Canada.

"The Work of the United States Bureau of Education" was then presented by Philander P. Claxton, commissioner of education for the United States.

The meeting then adjourned.

SECOND SESSION—Thursday Forenoon, July 11, 1912

Joint session with the American Nature-Study Society and the School Garden Association of America.

General Topic: "School Gardens and Agricultural Experiment Plots for Rural Schools."

The meeting was called to order at 9:30 A.M. in the Banquet Room, ninth floor, of Auditorium Hotel, Chicago, Ill.

In the absence of the president of the department, Elliot R. Downing, School of Education, University of Chicago, Chicago, Ill., presided.

The Committee on Nominations submitted the following report:

For *President*—Ernest E. Balcomb, State Normal and Industrial College, Greensboro, N.C.

For *Vice-President*—F. W. Howe, professor, Syracuse University, Syracuse, N.Y.

For *Secretary*—E. C. Bishop, Iowa State College, Ames, Iowa.

The report was adopted and the nominees elected.

It was moved and carried that the Committee on Course of Study in Agriculture be continued indefinitely.

Van Evrie Kilpatrick, president of the School Garden Association of America, New York, N.Y., then presented a paper on "Rural School Gardens Differentiated from City School Gardens."

A paper on "Progress of Agricultural Education in Ontario, Canada" was then given by S. B. McCready, Ontario Agricultural College, Guelph, Canada.

This was followed by an address by Elliot R. Downing, School of Education, University of Chicago, Chicago, Ill., on "The Home Garden and Experimental Plots."

E. R. Jackson, United States Forest Service, Washington, D.C., then read a paper on "Forestry and the Public Schools."

After a general discussion, the meeting adjourned.

THIRD SESSION, ROUND TABLE—THURSDAY AFTERNOON, JULY 11, 1912

The department met in round-table conference in Recital Hall, Auditorium Hotel, Chicago, Ill., at 2:30 P.M.

E. C. Bishop, schools section, Extension Department, Iowa State College, Ames, Iowa, presented the "Report of the Committee on Courses of Study in Agriculture."

Those taking part in the general discussion which followed this report were: Elliot R. Downing, University of Chicago, Chicago, Ill.; C. H. Robison, head of the Department of Geography and Nature-Study, State Normal School, Upper Montclair, N.J.; S. B. McCready, Ontario Agricultural College, Guelph, Canada; B. C. Moore, superintendent of McLean County Schools, Bloomington, Ill.

The meeting then adjourned.

E. E. BALCOMB, *Secretary*

PAPERS AND DISCUSSIONS

THE BETTERMENT OF RURAL SCHOOLS THRU AGRICULTURE: THE OHIO PLAN

F. W. MILLER, STATE COMMISSIONER OF EDUCATION, COLUMBUS, OHIO

In the year 1903 it was the privilege of the writer of this paper to make a trip thru the rural sections of Germany. Instead of following the beaten tracks of travel usually followed by tourists he went into regions in which the face of a foreigner was rarely seen. Instead of traveling by express train he traveled by stage coach, carriage, and often walked from village to village talking with the people who were at work in the fields, with the shepherd, the swine-herder, the goose-herder, the forester, the

mail-carrier, or any wayfarer whom he might chance to meet. He found the people hospitable and as eager to learn from him as he was to learn from them. He slept in their homes, ate at their tables, helped to feed their cattle, and even worked with them in the fields.

Their homes were not elaborate but comfortable. Their food was simple but wholesome. Their clothing was not made of broadcloth but kept their bodies warm, and they seemed to be a contented people. Their fields produced large crops, but having small farms, they were of necessity economical. It did not require a keen observer to see that the condition of those farmers was greatly improved over what it had been thirty years before. This great change in the condition of a whole class of people must be due to some fundamental cause. In reply to the question, "How do you account for your improved condition over what it was thirty years ago?" the same reply came from everyone to whom the question was put: "An intelligent use of artificial fertilizers and better farming. By better farming we have increased the productions of our fields by one-third and it is this extra one-third which we now get that makes us better off than we were thirty years ago." Such an experience with the German husbandmen could not fail to leave any but a deep and lasting impression.

The question naturally arose: If better farming improved the condition of the farmers in Germany why cannot the same thing be true in Ohio? For a change of this kind the first place to which we look is to the schools. When I was elected school commissioner the thought which was uppermost in my mind was: Is not the introduction of the teaching of agriculture into the public schools the best service I can render to the state? In scattered places the subject had been taught but it still lacked general application. To ascertain what the farmers themselves desired in this matter a small article appeared in one of our agricultural papers asking the farmers to send in their replies to the questions:

1. Do you wish to have the subject of agriculture taught in the public schools?
2. Do you wish it to be taught only in agricultural high schools?
3. Do you wish it taught as a part of the course in your regular high schools and elementary schools?

Over one hundred replies were received and they were practically unanimous in asking it to be taught in their own schools near home.

The one man in the legislature more interested than any other in this educational problem was Senator Cahill. In response to the general request of the farmers of Ohio and acting upon information thus acquired, there was drawn what became known as the Cahill bill, but this bill was destined to become a law only after a hard struggle. The opposition used and exhausted all of its resources but Senator Cahill, inspired by a feeling that he was right, put his whole soul and energy into his bill. After one of the most spectacular fights witnessed in the Ohio legislature for years the Cahill bill on March 11, 1911, was enacted into the Cahill law.

This law makes it mandatory that the subject of agriculture be taught in every high school and elementary school of the rural and village districts in the state. In order that the law might not become a dead letter, provision was made for four supervisors of agriculture whose duty it is to assist the teachers and boards of education to formulate their courses in agriculture and keep them in touch with the latest and best thought and accomplishments along agricultural lines. The state is divided into four districts, each district being in charge of one of these supervisors of agriculture. These supervisors are appointed by the state commissioner of common schools, who is made by this law the state superintendent of agricultural education. In addition to assisting the teachers and boards of education in arranging their courses of study their duty is to visit the schools, address teachers' institutes, teachers' meetings, farmers' institutes, and farmers' meetings, visit school exhibits, county fairs, and whatever and wherever they can be of service to the interest of teaching agriculture and to the uplift of the social conditions of the people in the country. Thru these supervisors of agriculture the school commissioner is brought into closer touch with the entire school system than ever before was possible. After one year's experience their influence and the influence of teaching agriculture is strongly felt.

In the past the country school had little in common with the life of the community. Our rural schools have largely been imitations of the city schools, instead of having a distinctive character of their own. The pupils in the country schools have been taught not country life, but city life. The ideals which have been held up before them were taken, not from the country, but from the city. Under such a system of teaching, nothing could be more natural than that, as our boys and girls of the country grow up to be young men and young women, they will turn toward the city, where they hope to realize those ideals which they have been so faithfully taught during their childhood days.

Prior to the enactment of the Cahill law agriculture in our rural schools was taught in isolated places where there was a teacher or superintendent who taught the subject by his own initiative or by the special request of his board of education. When it was learned that agriculture was to be taught in all of the rural and village schools many superintendents and teachers had their misgivings. They felt that they were unprepared for this new subject. But the teachers who had their heart in the work were equal to the occasion. They studied first with the sense of duty but they soon studied because they were interested. The supervisors of agriculture labored hard to render every assistance to the teachers and boards of education. They addressed teachers' institutes, teachers' meetings, farmers' institutes, agricultural societies, and schools, planning and helping wherever they could.

School had not been in session very long last September before it became

evident to the teachers who were trying to teach the subject well that more interest was being taken by the boys and girls in the subject of agriculture than in any other subject taught in the school. The children soon manifested a love for doing things and many ingenious devices were thought out which added to the interest already taken. Boys who cared little for books and less for school, but who knew about toads and bugs, trees and other growing plants, the brooks, the forests, and the domestic animals of the farm, found a new interest in the subject of agriculture which brought to them a new interest in the school.

My attention was called to a number of interesting incidents during the past winter. Boys and girls as they returned to the school in the morning reported to their teachers that they were not prepared in their lesson in agriculture. On being asked why, the answer was, "Father used my book and would not let me have it to study my lesson." Those fathers probably like many other men had thought that school agriculture, like many of the problems in our arithmetics, was some theoretical and impractical thing which had no practical application. But when they found that it told of the work in which they were engaged and offered suggestions which they recognized as practical, but which they had not known before, they became interested. The interest in the subject of agriculture stimulates in those fathers a new interest in their schools.

Some of the objections raised against the Cahill bill were that many of our rural teachers are women and hence cannot teach agriculture, that some of them came from the cities and know nothing about the farm and farm life, and that the beginners knew nothing about teaching agriculture. There is a young lady whose name I was requested not to mention and hence shall call her Miss Blank, who graduated from a city high school in the spring of 1911. She procured a position to teach in the country. Knowing that the subject of agriculture was to be taught she applied herself diligently to that study.

After school had been in session for about three weeks she took her class to a neighbor to see his dairy, which was reputed to be one of the best in the county. The man, who happened to be a member of her board of education, met her at the gate saying, "Well, you are going to show us old hayseeds how to farm, are you?"

She replied, "I expect to teach your boys and girls at least a few things that are worth knowing."

Again he asked, "Can you tell the age of a horse?"

"Yes sir, I can."

"I would like to see you do it."

"All right, where are your horses?"

She surprised him with the readiness with which she could tell the age of a horse. Then turning toward the farmer's fourteen-year-old son Miss Blank asked, "Can Will tell the age of a horse?"

"No ma'am, I have never shown him."

"Here, Will, let me show you."

It took but a short time until Will said he understood. As they walked out toward the dairy Miss Blank said, "I see you have a good stand of clover in your west field, but why don't you raise clover on that knoll in the north end?"

He replied, "Clover will not grow there."

Again Miss Blank asked, "Have you ever tried it?"

"Now see here, don't give me any of that book agriculture; I have been living on this farm for twenty-one years and I know no clover can be made to grow on that knoll."

There was no use to argue the matter but as they went thru the clover field on their way back to the schoolhouse, Miss Blank asked every one of her pupils to take with them a handful of dirt from the knoll. Blue litmus paper was applied and turned red. The children understood that this indicated an acid condition of the soil, that clover does not thrive in an acid soil, and that lime overcomes the effect of the acid.

That evening Miss Blank purchased five cents' worth of lime, some potash, and clover seed. The next morning she asked the children to join her in a secret, to which they agreed. Armed with their spades, hoes, and rakes the entire school proceeded to the knoll and soon a barren spot of ground on that knoll had been worked fine, limed, fertilized, and sown in clover. Being in the fall of the year and fearing an early approach of cold weather, they watered the spot every other day with warm water. In two weeks the bed was green. Will was told to go home and bring his father. Will ran all the way and urged his father to come to the clover field quick without telling him why. Thinking something was wrong, he hastened, and there on the knoll stood Miss Blank with the children, by the side of the bed of green which the farmer recognized as young clover, and this upon the knoll which for twenty-one years refused to grow clover, but which responded to school agriculture as if by magic touch, the school agriculture taught by a young lady from the city.

Ten days later this farmer, who, you recall, was a member of the township board of education, asked Miss Blank not to look for another school next year. In January while addressing the board of education he said that he was ready to vote ten dollars more per month for every teacher in the township who was doing work like that done by Miss Blank.

What the influence of the school agriculture taught by Miss Blank has been, my good friends, I will leave to you to judge. She who wills, will, but she who wills not, cannot.

The agricultural exhibits and contests of the schools bring men and women into schoolhouses where they have not been since their childhood days. The fact that men and women are brought within the four walls of the schoolhouse by means of these exhibits will create within some of them at

least a new school spirit and new school sentiment. Life in the country is too solitary. New movements can be started only by getting the people together. The germs of new educational movements are given birth at these meetings. Here are given the opportunities for friend to meet friend and neighbor to meet neighbor to exchange a few words of friendly greeting and to discuss what they can see at the exhibit. The farm papers that are on display are picked up by the visitors and soon you see some farmer glancing over one of these papers, when suddenly his hands become quiet and his eyes become fixed upon some spot on that paper. He has found something in which he has become interested and before he parts with that paper he jots down the name and address and becomes a subscriber. Another picks up a book on agriculture. At first he thumbs the leaves but soon his thumb ceases in its operations and he is reading. That book soon finds a place in his home.

That exhibit becomes a common topic of conversation and the thoughts of many people are directed toward their school. Parents begin to read more extensively and take more interest in education. This means better schools, for, just as a speaker is inspired by an interested and attentive audience, so a teacher is inspired by an interested community.

In the past the time used in arithmetic has been spent upon problems which have little bearing upon farm business. A farmer sells a load of hay at $17.50 a ton. On his return home he hands the weight bill to his son and asks him to compute what this load of hay is worth. The son must admit that he cannot do it. Can you blame that farmer for being disgusted and lacking appreciation for the school?

On the other hand, what would be the contrast if his son had been taught the principles of farm business and farm problems? He could then be his father's helper and counselor in transacting business. The advantages of an education have not been so plainly visible in the country as they have been in the city, but when the teaching of our rural schools is such as to teach farm business and farm work, the value of an education will become manifest to the farmer, who will show his appreciation and gratitude by loosening his purse strings.

When it is discovered that practical subjects are taught and that the school prepares for life-work, school in general becomes more popular with the public. The study of the subject in the past in foreign countries has resulted in increased yields and permits better living. This improved condition of life will soon be reflected by improved schools. The habit of truancy will become less as a result of increased interest on the part of the pupils and a better co-operation on the part of the parents. That boys and girls take more interest in farm work and farm life after studying agriculture in the public schools has been clearly demonstrated by Mr. Ivins, at present one of the supervisors of agriculture, who in the fall of 1906 was called by the board of education of Turtlecreek Township in Warren County

to introduce that subject. At the beginning of his term he asked all pupils who intended to remain on the farm to raise their hands. Only 15 per cent of the pupils of the township indicated their intentions to remain on the farm. After the subject was taught for four years, the same question was asked and 85 per cent indicated their intentions to remain on the farm. In those same schools during these four years the average daily attendance on monthly enrollment rose from 75 per cent to 96 per cent.

When contentment arises on the farm, people will become more interested in their own institutions. They will care more for their schools, which they will regard as the hen which lays the golden egg. Better school buildings will be constructed and consolidation will be encouraged in order that the pupils may have the use of better apparatus and have access to better and larger libraries. Arbor Day was better observed this spring than ever before in the history of the state and hundreds of shade trees have been planted upon school grounds where trees had never been planted before. Many lawns and yards have been beautified as a result of this educational movement in the schools.

The secretary of agriculture of Ohio has been of great assistance to us in promoting this work. We have secured the co-operation of the National Association of Audubon Societies for assistance in promoting the study of birds. Our work has encouraged the experiment stations and the national department of agriculture to co-operate with us by issuing bulletins for the especial use of teachers and pupils. As a result they have been brought into closer relations with the patrons of the schools.

The time was when it was said, if you can do nothing else you can farm. The teaching of agriculture has disclosed the fact that to be a successful farmer there is required executive ability, business acumen, and wide range of knowledge, a range of knowledge wider than that required by the merchant, the lawyer, or the doctor. The successful farmer must understand the feeding and care of all of his domestic animals, dairying, horticulture, the nature and care of his soil, the condition of crops over the entire country, and other subjects almost without number. By putting intelligence into farming, farming is becoming dignified. As this is becoming recognized by the people of the city their attitude toward country people is fast changing. The country boy need no longer be ashamed to admit to his city cousins that he is from the country. Such expressions as "Rube" and "clodhopper" will soon be relegated to the past and become obsolete. With this uplift of the social status of the country people they will have a greater social self-respect and greater respect for their own institutions, including the schools.

It is not the desire of the school men of Ohio to have only agriculture taught in the rural schools, neither do they wish agriculture in the schools to run to seed altho it is their desire that the spirit of the farm permeate the rural school system. Agriculture is entitled to its rightful place and

portion of time in our school curriculum. It should be taught together with the other subjects so as to develop the highest type of citizenship. Each subject should be given its proper share of time so that our educational system will be in a state of equilibrium.

In this progressive movement it has very naturally followed that the teacher has not been trained before the creation of the needs of the community and the demands for his labor. Methods in education will always conform to the contemporary demands of the age. This has never been demonstrated with greater clearness or force than in the manner by which teachers have cheerfully conformed to the requirements and adapted themselves to the new situation. To the ready and willing support of thousands of teachers in Ohio is due greatest credit for the remarkable success of this undertaking.

THE BETTERMENT OF RURAL SCHOOLS THRU BOYS' AND GIRLS' CLUBS: THE NEBRASKA PLAN

JAMES E. DELZELL, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, LINCOLN, NEBR.

The idea of establishing boys' and girls' contest clubs was conceived by our former worthy state superintendent, E. C. Bishop, now superintendent of agricultural extension in schools in the Iowa State College, Ames, while he was deputy under State Superintendent J. L. McBrien. This plan invested in the state department of public instruction the central power, made county superintendents the co-operating generals, city, town, and rural teachers the under-officers, and the pupils the "infantry."

With this vast and well-disciplined army of co-workers, the children of the entire state were united in a definite line of vocational work. Agriculture and domestic science were prominent themes. Corn contests, potato contests, cooking and sewing contests, school garden and home garden clubs were organized for the boys and girls. This work was further promoted by monthly bulletins sent out by the state department of public instruction, and a card system record was kept in this office of the work done by the individual pupils.

The work was so planned that the boys and girls entered into the scheme and ideas with really more zeal than into the ordinary school sports.

It would seem at first that the "Nebraska plan" would detract from the regular school work. However, it was soon discovered that Superintendent Bishop had hit upon a practical plan which not only added to the financial side of the boys' and girls' lives but also gave the boys and girls of the rural districts a "vision" of the real meaning of life. It taught them that in becoming good farmers and good homekeepers, there was more in life than drudgery, and that their school work prepared them to see that "vision" of life.

When Superintendent Crabtree entered upon his duties as state superintendent, he followed in part the "Nebraska plan," but gave the State Agricultural School a wider range of control. When I took up the work of this department, I placed the entire management of the boys' and girls' clubs in the hands of the State Agricultural School. The work is now carried on the same as formerly, with the exception that the clubs are in active touch with the State Agricultural School. This gives the boys and girls an incentive to become actively engaged in a scientific course of home and farm work. With this in view, the pupils in the rural schools are more earnest in their work, our rural teachers are better prepared than before, our schools are more like workshops, and the "completed products" are demonstrations of the facts.

The following report made by Assistant State Superintendent Anna V. Day, upon her return from visiting the Keith County rural schools, will suffice to show some of the benefits of domestic science clubs in the rural schools:

> The schools of Keith County are making a point of serving hot lunches at noon to the children, instead of the unappetizing cold lunch of time-honored custom. The first school visited was District No. 5, about five miles from Ogalalla. Here Mrs. Rosengrant has five pupils in attendance. While they study their arithmetic lessons, she does the simple cooking necessary. On this particular day they knew that company was coming and the menu was a little more elaborate than usual—boiled loin of pork, macaroni, and potatoes baked in the ashes. These, with the bread and butter, and the fruit provided by Mrs. Richmond (the county superintendent) furnished a meal good enough for anyone, and those who were fortunate enough to be present did it ample justice. Mrs. Rosengrant began this work because she felt that some of her pupils were not getting sufficient nourishing food at the noon meal, so teacher and pupils now talk over from day to day what they will have, and each one furnishes that which is most convenient. So satisfactory have been the results of this plan that the members of the board are considering furnishing the supplies for these lunches themselves next year. Usually only one hot dish is provided. Some of the neighboring districts are taking up the work. It seems destined to become a permanent feature of the rural school program, as well as of many city schools.

These clubs will, within a decade, have so changed the ideals of farm life in Nebraska that the boys and girls will hail with delight the time when the preparatory stage of school life is over and a nice farm and farm home is the reward for the preparation made under the "club" movement in Nebraska. We shall then have better schools, more happy farm homes, and the ideals of farm life will be of such high standard that Nebraska will rise up and call Professor E. C. Bishop "a man who was worth while." Nebraska today envies Iowa's opportunity of having a man with vision so clear that she will have a chance to outshine us; but we have one consolation, and that is, that the seed sown in Nebraska has taken deep root and we are now in the race to keep our schools to the front.

The Nebraska plan for boys' and girls' club work is doing much toward making the rural school a social center. It aims to make the school represent, as it should, all the ideals of beauty, culture, refinement, and goodness of the community.

THE WORK OF THE NATIONAL COMMITTEE ON AGRICULTURAL EDUCATION

HOMER H. SEERLEY, PRESIDENT OF IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA, CHAIRMAN

Organization.—Seven years ago the National Committee on Agricultural Education was organized at Chicago for the main purpose of promoting the cause of the education and training of teachers in agriculture for the public schools. This committee was organized with twelve members selected from the different parts of the country and was authorized to give its attention to the publicity and promotion of such measures as gave promise of securing results in extending agricultural education. This committee has been enlarged from time to time as circumstances made it necessary, until today there is an active member in each state in the United States, where agricultural education is of dominant interest. The chief undertakings of this national committee have been managed by an executive committee consisting at present of Homer H. Seerley, of Iowa, president, and Ernest E. Balcomb, of North Carolina, secretary. The other members are E. C. Bishop, of Iowa, formerly of Nebraska, D. B. Johnson, of South Carolina, Thomas C. Miller, of West Virginia, and H. G. Williams, of Ohio.

Work done.—This committee has conducted a constant campaign to obtain national aid for this cause. It has given all of its time and strength to the promoting of such national measures as the Burkett bill, the Davis bill, the Dolliver-Davis bill, and the Page bill, which proposed plans followed each other in successive development. The Burkett bill chiefly sought the education of teachers in agriculture, the Davis bill added to this single aim the granting of aid to secondary schools for the teaching of agriculture and mechanic arts, while the Page bill—the present-day measure—provides for the appropriation of $15,000,000 annually from the national treasury to be used for vocational education in normal schools, secondary schools, agricultural colleges, and other phases of industrial educational organization.

The work done included a hearing before President Roosevelt, another before President Taft, another before the Senate Committee on Agriculture, another before the Congressional Joint Committees on Agriculture, and an extensive correspondence with educators in all the states to secure cooperation in asking the support of congressmen and senators for this national aid for agricultural education in the public schools. In addition to these more prominent activities, the National Committee has held meetings in connection with the Department of Superintendence, the Department of Rural and Agricultural Education, and the Department of Normal Schools. It has also prepared many articles for the educational press and has had a part in many state and district conventions where the questions of agricultural education have had large and prominent place.

Service free.—During these years this work has been done by the different members without any remuneration and even without any contributions to pay expenses of postage, printing, or travel. The members of the committee have cheerfully done this work with the settled conviction that such a change in educational endeavor was absolutely essential if the public schools were to be the instruments of culture and training that the need of the present age demands. There is a growing sentiment in favor of such instruction in agriculture. Much progress is being made in all these phases of industrial activity and interest and the National Committee believes that its work has not been in vain, as the need of training the teachers is now an accepted fact in every measure that is proposed by either states or nation.

Prospects.—There are good prospects for the securing of national aid for this modern kind of education. On June 5, 1912, Hon. Carroll S. Page made a speech in the Senate of the United States on Senate Bill 3, in which he presented the plans now approved:

> To co-operate with the states in encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools; in maintaining instruction in vocational subjects in state normal schools; in maintaining extension departments in state colleges of agriculture and the mechanic arts.

This co-operation was to consist in the appropriation of money by the United States and in the wise expending of the same so as to develop practical education.

This great measure has had majority support in both houses of Congress for several years. The chief difficulty has been the preparing of a suitable bill which can be satisfactorily applied to the needs of the different school systems of the several states, and yet guarantee that the United States has some way to compel the proper expenditure of such funds by every state accepting them. Some states are willing to accept the proposed money, if they are to be allowed to use it according to their own notions of application. They seem to think interference by the general government undesirable and unsatisfactory. They demand a free hand and they therefore resist any semblance of supervision or inspection on the part of the United States. Because of differences of opinions regarding administration the day of success is being postponed from session to session, but there is every reason to believe that these problems are gradually being solved and that the nation will assume the prerogative of assisting educational development and improvement as much as it now does every other kind of progress and endeavor. Because of these facts, every friend of agricultural education can afford to co-operate heartily with the National Committee in securing the passage of Senate Bill 3, the Page bill. There is no need of growing weary in well-doing, as national movements are not ripened and accomplished without much unexpected delay and without much strenuous and continuous activity. Educators should keep up the

agitation and demand the grants which are essential to the proper education and training of the masses. Anything less than this is unhumanitarian and unpatriotic.

Let the good work of increasing capability and happiness for every child of school age be the slogan of the progressive educator who realizes the great needs of this time.

RURAL SCHOOL GARDENS DIFFERENTIATED FROM CITY SCHOOL GARDENS

VAN EVRIE KILPATRICK, PRESIDENT OF THE SCHOOL GARDEN ASSOCIATION OF AMERICA, NEW YORK, N.Y.

In the continent-wide movement for school gardens, or a return to the outdoor education, there seems to have been little appreciation of the real points of contact and of difference that exist between rural and city school gardens. The common elements are fundamental, the points of difference control the entire field of application. The rural school garden is very different, both in direct objects and methods from the city school garden.

THE COMMON FACTORS

All school gardens, or the effort to educate children in the open, are justified upon these reasons taken from many others:

School gardens offer a fundamentally educative material. The knowledge of the manifestations of Nature is certainly just as important as any other body of knowledge. This work develops the mind; for example, witness the commanding leadership of the farmer and the farmer's boy. This work also is most useful in self-support, as agriculture is and always must be our greatest industry.

School gardens promote health.

We have found that the habituation of living in the narrow confines of a classroom is a positive detriment to the fullest physical development of children. Young children, particularly, should be kept out of doors. The school garden offers just the right sort of educative activity to keep them in the open air. I have come to believe, from many years' experience as a teacher, that children under the age of ten years would learn much more of the three R's, if confined not more than three hours each day in the classroom. The remaining three hours should be spent out of doors in supervised play and garden work.

It is just as incumbent upon the state to provide land for the outdoor education as it is to provide buildings for the indoor education. Again gardening, everywhere, if conducted properly, is very interesting. Interest which arouses the will-power is the most potent force in the educative process.

It is nature, yes, it is life itself for a child to enjoy the growth of his own plant. When the flower bursts forth he becomes ecstatic.

THE RURAL SCHOOL GARDEN

Gardening in the country school will never be made interesting and profitable until we fully realize its most primary objects.

Rural school gardens should aim to idealize agricultural work. The school that habituates the farmer's boy to the fine arts and letters teaches him to look down upon farm life, if not to despise it. We do the work that we think is most worth while or most respectable. The rural school garden must surely lead the child to look upon agriculture as an important calling.

The second great purpose of the rural school garden is that it leads directly to improved agricultural methods. The whole field of advanced agriculture should be developed. Every elementary activity of husbandry, gardening, and forestry is quite within the possibilities of the broad notion of the country school garden. For example, potatoes may be raised under varying conditions. Different seeds may be tried as well as various plans of harvesting and marketing.

THE CITY SCHOOL GARDEN

The objects of the city school garden are primarily to give the city child an opportunity to be educated, in part at least, out of doors, to give him a taste for more open living, and to occupy his idle time pleasurably and profitably.

It is idle to say that there is not room in cities for school gardens. Room will be found the moment the public is aroused. The city must come to understand that the child cannot be properly educated while housed in congested quarters the greater part of all working-hours. It is madness to think we can educate thru incarceration. The question is not, "Can the city child have a school garden?" He must have a garden or not come into his own. The evidence is on every hand that children educated in our city schools are found seriously wanting. The city child needs first of all an opportunity to work in the open air and the sunlight. He is not learning so much to be a gardener or an agriculturist as he is to utilize the manifestations of Nature to become an educated being. It is not necessary for him to grow potatoes in different ways. He has attained his purpose when he has learned to grow them at all. To thousands of city children it is not a little matter, even, to find out that a potato grows in the ground. A taste for better living conditions is bound to follow city school gardening. The child that nurtures a plant from seed to maturity learns to love that plant. He learns to love plant life. When he grows to be a man he will refuse to be confined in tenements, but will seek a home that is near Mother Earth.

The city garden, open during the entire season including vacation, offers a means of providing for the proper employment of the city child's idle time. In the country, children have chores to do, but not so in the city. Parents do not know what to do with their children in the summer time. The garden is the very best form of an industrial summer school.

HOW THE FUNDAMENTAL AIMS WORK OUT IN APPLICATION

The rural school should first of all be much larger than the city school garden. Room should be given to try a variety of experiments on the part of the school, if not on the part of each pupil. Practical comparative tests, to be of value, need room. If the scope of the rural school is extended to cover at least the elements of agriculture, such as animal husbandry and the production of field crops, then a rural school may profitably be placed in the center of a small farm. This, however, should be looked upon as a development of future agricultural teaching which has not yet appeared. But it is bound to come. In fact, this school farm may become the educative center of an entire agricultural community and serve both young and old.

Now the city school garden should be a garden of one-half to an acre of ground around the school where each child may have a plot about 5 by 8 feet. This will occupy his idle time and keep him engaged in the open air to his great benefit. Thru expert supervision and intensive cultivation he will be enabled to derive a really valuable product in vegetables and flowers. He will gain in his knowledge of all plant life and become familiar with the chief food products.

A city school garden may also contain observation plots which may show a wide botanical scope of plants from different parts of the world. A corner of the garden may contain a fish pond and another corner may be devoted to animal life, such as the culture of chickens. A school kitchen which uses the vegetables may be placed in a third corner. The fourth corner may be made a nursery of trees, shrubs, and vines. With this equipment the city child will best come into his own thru living.

Thru creating in the mind of the boy an ideal, the farmer's son is saved to develop the farm. He is not made ashamed of his birthright. His education trains for greater efficiency.

The city child on the other hand, altho he does not become a farmer, is trained for a greater citizenship. In the open air and sunshine, he must grow to become a stronger man. Surrounded with plants and flowers, he must become a better man; and busy in their cultivation, he is ever out of the malevolent mischief of the city streets. He, too, must have gained a saner and more intellectual mind from so natural a training. With such citizens, the squalor of the city must go. The new city, which is the country, will arise to take its place.

PROGRESS OF AGRICULTURAL EDUCATION IN ONTARIO, CANADA

S. B. MCCREADY, ONTARIO AGRICULTURAL COLLEGE, GUELPH, CANADA

[*Synopsis*]

The problem of introducing agriculture into the schools of Ontario has been constantly with us since the organization of the schools into a provincial system over sixty years ago. At that time the teachers were instructed in the subject at the provincial normal school, and educational leaders looked forward to agriculture becoming commonly taught.

There have been many ups and downs in the attempt to introduce the subject since then. At different times three different textbooks have been specially prepared. The subject has been at one time optional, at another time obligatory, and then again optional; at one time it was a subject of examination; up to within a few years it has been practically unheard of. Nineteen years ago an attempt to have teachers specially trained was made and the first teachers' summer course given at the Ontario Agricultural College; this scheme was abandoned when the subject was removed from the list of obligatory studies. For many years the schools have been invited to organize special courses for the highest classes of the public schools and the lower classes in the high schools along lines corresponding to the commercial courses. But not one school has ever undertaken the work!

Agriculture has not been taught chiefly because the people at large have not wanted it taught! It will be taught when people want it taught! The people can always have any good thing that they want! The awakening of right educational desires is the first necessity in solving the problem of agricultural education!

With the introduction of nature-study into our schools in 1904, the beginning of a new movement was made. This subject has gradually won a place for itself in our schools and naturally has opened a way for the introduction of agriculture in an acceptable form. We are now at the place where we know that the work can be done and also how we can do it. We are approaching the place where the people, knowing this, will want the work done, the consummation devoutly to be wished.

Associated with the nature-study there has always been a special effort to have the work carried on in school gardens. And progress has been made. Where in 1910 there were fifteen schools taking up the work in school gardening, last year there were thirty-three schools, and this year there will be more than a hundred. From now on rapid progress should be made.

These are some of the means operating at the present time to promote the work:

1. Teachers are trained for the work at the Ontario Agricultural College. In some cases scholarships are provided to enable teachers to take this training.

2. Graduates of the Agricultural College have within the past five years been located in thirty-two centers as county agricultural representatives. These young men are assisting the county schools to take up the work as well as teaching the subject in the high schools.

3. Trustee boards receive special grants when they have the subject taught in their schools.

4. Teachers also receive special grants for teaching the subject thru practical work in gardening.

5. A Director of Elementary Agricultural Education directs the work thru the province at large, sends out seeds and planting material, attends teachers' associations, and carries on a propaganda on behalf of the subject.

6. The Department of Education issues special bulletins, instruction sheets, and charts on agriculture. These are sent to every school.

THE HOME GARDEN AND EXPERIMENTAL PLOTS

ELLIOT R. DOWNING, THE SCHOOL OF EDUCATION, THE UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Home was first established in a garden and the garden still makes normally the proper setting for every domestic Eden. Humanity and the soil have been so inseparable that even the words themselves are products of the same root, human and humus springing from a common stem. The home, humanity's stronghold, is so firmly rooted in the ground that those city dwellings that stand propped up in mid-air, human pigeonholes, are as anomalous as the proverbial fish out of water. Degeneration and decay speedily follow most attempts to force the home to strike air roots. The main problem of the city is, therefore, the problem of rapid and cheap transportation and of low suburban rents that the condensation of population demanded by modern economic conditions may be a concentration of workers only, not a massing of homes to the point of obliteration. Other means of alleviating the evils incident to our modern city life are palliative. The re-establishment of homes upon the soil is remedial. Belgium has progressed most rapidly in this attempt to provide cheap urban homes with land about them. The English garden cities are successful ventures along the same line.

To the city child, banished to a desert of pavements and brick-walled canyons, the school garden is an oasis that gives a glimpse of the providence of Mother Earth. The school garden came into existence as an attempt to keep the city child in touch with the soil, his natural teacher. And

humanity does well to return often and much to this same provident nature under whose tutelage man has spent ages of primitive life in sharpening his wits and making keen his senses. Today the School Garden Association and the American Nature Study Society have the larger part of their constituency in the cities, where the need of the child's contact with "Nature, the dear old nurse," is the most glaringly apparent.

Yet the school garden is at best more or less of a makeshift until the home can re-establish itself upon the soil where it belongs. The home garden is really a natural thing. In primitive society the home is the conservator of the social heritage; parents are the child's chief teachers in needed knowledge, the arts and crafts, morals and ideals. The increasing complexity of society, the resultant specialization with a consequent cramped horizon for the worker and a decreased efficiency for the parent as an educator, these and other factors have necessitated the school. So completely, and, I believe, more or less unwisely, does the school tend to take over the functions of the parents, standing *in loco parentis*, that when any desired social reform is apparent, such as increased knowledge of sex hygiene, added respect for the manual arts, or a return to the interest allied to the soil, the reformer turns to the school and tries to lay upon the teachers the burden of the reformation. It is high time that the teacher refused to become the beast of burden for all the tasks the home finds inconvenient. These and similar improvements must be accomplished in large measure by assisting the home to resume its normal functions rather than by an assumption of the duties of the home by some extraneous agency.

I know it is an easier task, at the outset, to establish a workable school garden in the average community than to inspire such co-operation on the part of parents as will insure adequate home gardens and fix them as a custom—gardens wherein the parents work along with the child, imparting their garden lore as they have learned it from grandfather and grandmother in the dear old-fashioned garden. Be assured right here that the average dweller in most cities and in nearly all towns as well as in the country can still do a very creditable job of gardening and could, if he would, induct the child in the art quite as well as the average teacher. Tho the school garden may be an easy and quick means, such shortcuts are, in the long run, often unsafe. We have found them lamentably so in methods of juvenile reform. The school method with reform schools and institutions for dependents has given way to the placing-out method—a return of the child to the home, its own if possible, a better one if its own is irremediably bad.

The school garden is the only garden possible in many sections of our great cities. But in the average city school where vacant lots are available and in the schools of town and country the ideal is found in the separate child's home garden for the younger children, or his interest along with the rest of the family in the home garden as he grows older. I am assuming now

that the school recognizes in the garden an important means of education and deems it worth while to spend its energy in the direction of such work. The school garden would be the natural laboratory for these educative processes were it not that the home garden offers as good opportunities for them and has these added advantages: It establishes normal relations of instruction between parent and child. It adds to the economic resources of the family. It enables the school to avail itself of the skill and knowledge of the entire community in the garden instruction. It makes it possible to do valuable educational work without any additional expense for land or equipment. The home garden overcomes some of the chief difficulties in carrying out a garden project in connection with the school. In the absence of teacher and pupils during the summer the school garden must be neglected, and if it survives at all, by fall it is a discouraging mass of weeds or else the care of it devolves upon a janitor or a few of the more enthusiastic pupils. The home gardens go on all summer with increasing interest. The crops that may be raised in the school garden are limited to such as mature very early before school closes in the spring or those that mature late in the fall. Then it is difficult to get many of the older boys, especially, to work with enthusiasm in their school plots if they must also hoe the garden at home. If, however, the home garden comes to be a center of interest for the entire school and is to receive visits for inspection by the teacher and the rest of the children, an added dignity is given to the project and the child's pride is aroused, particularly if some bit of excellence can be discovered in the home plot worthy of commendation.

The school plant is being more and more utilized as a central clearing-house for ideas and activities that pertain to the community. Education is life and the currents of life about the school are the best sources from which to energize the life within the school. There are probably twenty home gardens, at least, represented by every schoolroom, ranging from an unpretentious window garden, a flowerpot or two adorning the kitchen window-sill, to the market garden that yields its generous profit. There are a score of gardeners of varying degrees of skill, each probably having some specialty in which he or she has acquired proficiency. There is the woman who has the knack of making fuchsias bloom abundantly and everlastingly. Her bay window is a delight to herself and the envy of her neighbors. There is the man whose strawberry vines never fail or the one whose potatoes always take first prize at the county fair. Let not the teacher assume that he can instruct these experts. Indeed the skillful teacher is coming to realize in garden work as in other lines that his function is less to personally impart information and more to direct and organize the instructional opportunities and agencies in the daily life and environment of the public. If John's father is the skilled strawberry culturist, arrange thru John for the garden class to make several visits to this garden so that they can see the various processes in the successful care of the plants. Probably John

will be glad to go to the gardens of the other boys who are attempting to grow strawberries to show them the tricks of the art. Under the guidance of the woman who raises fuchsias so successfully some children will surely be anxious to try their hands at it. Many homes may thus have their pots of plants. The slips will be generously given when the good lady has a chance to impart her skill and to interest others in her delightful hobby. Another bunch of pupils may start apiaries if one successful bee culturist lives in the neighborhood. Indeed the teacher will find her own yard and home becoming increasingly beautiful and productive as she gradually acquires the skill imparted by this corps of voluntary instructors.

Such co-operative instruction must not be left to haphazard efforts. The teacher must make careful inventory of the possibilities of the neighborhood. She must learn who are the skilled specialists. A monthly exhibit at the school of garden produce from the home gardens open to pupils and parents alike is an excellent means to this end. Then the work must be carefully planned, visits to the various home gardens arranged at the most opportune times, periods assigned for the discussion and written reports that properly follow and for the assigned collateral reading. Indeed the course of instruction must be laid out with even more care than would be the case in most subjects in which more or less reliance can be placed upon the text for systematizing the work. In the school of more than one room the work must be planned with teachers and principal in consultation, so that one room will not duplicate what another one has already done, and so that the work may be appropriately graded.

To initiate the home garden movement, then, I should advise early in the fall an exhibit at the school of the garden produce, flowers, vegetables, fruits, both fresh and preserved, that have been grown by the children alone or which they have helped to produce or prepare. Ask some of the older people of the community to come in and tell the children about the varieties shown, how to know them, their advantages and peculiarities. Let the teacher make note of the homes from which especially good things come. Let excursions follow, after school, to some of the gardens where produce is still growing, vegetables ripening, and fruit trees bearing their burdens. With the upper grades study the whole situation, the location of the garden with reference to the compass points, to the hill slope, drainage areas, character of the soil, methods of cultivation, prevention of pests, harvesting and after-care of the produce. Estimate the cost of production, learn the market prices, and approximate the probable profits.

Stimulated by the enthusiasm aroused in this study of results already achieved by the more successful boy or girl gardeners, begin the plans for the gardens of the next spring, and for the window gardens of the winter. Announce a competitive exhibition of pot-grown plants to be held, say, in March. Have it understood that it is to be an exhibit of "home-grown" plants, emphasizing the home as the working unit. Possibly the seeds

or slips may be given out at school but it is better if the stock of these be supplied from some one or more of the homes. Try nasturtiums, stock, or petunias from seed; geraniums, roses, or fuchsias from cuttings. Meantime let the lower grades be studying seeds and seedlings, the intermediate ones soils and the general physiology of plants until they know by actual observation and experiment that plants breathe, how they feed, and what functions the more important organs have. Let the upper grades be collecting the seeds of the various crops of the neighborhood, the forage and pasture plants, and the weed seeds. Let them study them with simple lenses so that they may be ready to select wisely the garden seed. This is merely suggestive of the sorts of things that may be done in connection with the home gardens. The aim in it all will be to develop well-organized school exercises on the basis of the opportunities afforded by the garden work of the neighborhood. It must all be intelligently graded to meet the increasing capacity of the pupils.

With the approach of spring plans will be begun for the new home gardens. It would be well for each pupil to draw in duplicate a map or plan of his own home garden. One of these the teacher may keep on file—the other will be the child's working-plan of his plot. These may be simple yet accurate sketches in the lower grades. They may be carefully made plans drawn to scale in the higher grades. I need not go into details regarding the planning, planting, and caring for the garden. The chief concern of the teacher will be so to direct the work that all available skill of the neighborhood is placed at the disposal of these boys and girls, that the instructions shall be as far as possible informal, parental, and neighborly, yet orderly and sequential.

The tact of the teacher will be taxed. She must realize that her pupils are now learning as they will learn in life, by observation and imitation of neighbors and friends. She must assume no airs of superiority but willingly confess her ignorance and learn, become a pupil without losing her prestige. I trust she will be sensible enough to undertake the cultivation of a small plot herself, wherein she will find much food for reflection even if it does not provide much for mastication. And her garden will serve to refresh her spirit. She must direct the visits to the various gardens for observation, direct the discussions that follow, direct her pupils toward correct conclusions, and yet she must not even seem to desire to boss the various garden projects of the neighborhood.

Such a plan as this—and I am suggesting nothing new, merely what is already more or less successfully operating in many communities—such a plan necessitates almost immediately two things:

First: It makes imperative a reference library on the various phases of gardening. This may be put into a special room of the public library. The library is always willing and glad to co-operate. Or it may be placed in some room at the school to which the community may have access evenings

and Sundays as well as during the day. A hundred dollars, or even ten, put into books that are recent on practical gardening, the soil, horticulture, floriculture, the physiology of the plant, insect enemies and other pests, together with the government and state publications that may be had for the asking, will make a nucleus wonderfully attractive to the general public, useful to teacher and pupils alike. Such a little library may well be a common meeting-ground of school and community, a commercial mission station, the propaganda from which may convert the neighborhood into a much more prosperous community in these days of rapidly progressing methods in agriculture.

Second: There will also inevitably follow an experimental garden. So many new methods will demand demonstration, so many mooted points will need settlement, so many new principles of soil chemics, hybridization, selection, etc., will need to be tried out before the community will accept them, that a plot must be set apart for such purposes. Let this come, however, only when the demand for it is created. In some neighborhoods it may be an easy matter to secure a piece of property for the school for such a purpose immediately; in others it would be well to wait until in the natural course of events the home gardens have generated so many questions that an experimental plot is a necessity. Possibly nearly every home garden will want its own little corner for experimental purposes. Even so it is well to have a plot which the school may direct where some of the most skillful of the older gardeners may try the desired experiments under as nearly ideal conditions as can be devised.

FORESTRY AND THE PUBLIC SCHOOLS

E. R. JACKSON, UNITED STATES FOREST SERVICE, WASHINGTON, D.C.

The educational theorist who comes before the public to advocate any addition to the work of our modern schools is not likely to meet with a very enthusiastic reception from public-school teachers, no matter how plausible and forceful his argument or how worthy his idea in the last analysis. He must be a courageous man who has the temerity to attempt to convince the pedagogical world that he has discovered a new task for our teachers or a new duty for the school; for the teacher who faithfully attempts to perform her whole duty as outlined for her in the course of study adopted in the average school of today will be fortunate if she does not break down from the strain, a victim of overwork and mental exhaustion.

The modern school is a very complex and far-reaching institution compared with those which our grandparents attended. In those days, the schoolmaster was expected merely to maintain order and to drill his pupils daily in reading, writing, and arithmetic. He was deemed a good and faith-

ful servant if he succeeded in teaching his young protégés how to spell and cipher a little. But today, things are changed. Now, the teacher who meets the requirements laid down in the superintendent's manual must not only be proficient in the ordinary branches of the curriculum but he must be ready to train the boys and girls in literature, science, the arts, and even the trades. The school seems to have taken over, willingly or unwillingly, most of the responsibilities which formerly fell upon the home, the shop, and even the church. We have had to introduce courses in "manners and morals" into our schools, because the parents seem to be too busy to look after the manners of their offspring, while the Sunday school, with its time limited to one hour out of seventy, doesn't get much opportunity to wield any influence over the morals of even the comparatively small percentage of children who attend it.

Even more recently, our schools have been called upon to assume also the vocational and industrial training of the children, and so strongly has this been advocated, and so great was the need, that now every school that claims to be up to date in its equipment has a manual-training shop and a domestic science laboratory. Father used to teach the boys how to saw a board straight or to drive a nail without smashing a thumb; and mother used to teach the girls how to hemstitch a handkerchief, cut out a dress, and bake a loaf of bread; but now the poor teacher must do all these things in addition to the commonplace task of teaching the three R's. It seems that every fanatic with a fad or enthusiast with a propaganda wants to try it out on the school. The teachers have been asked to become enthused over every proposed movement or reform from temperance to tomato-canning, and the end is not yet.

Perhaps some teachers, reflecting on these things, have begun to feel that theirs is a much-abused and downtrodden profession; but, to my mind, all this has another significance. In the first place, the fact that everyone wants his pet hobby or whim adopted by the public schools is the best possible refutation of the charge so frequently made, that our schools are inefficient. And in the second place, these new demands on the school are merely the expression of a great change which is irresistibly going on in our school system, as well as in our economic life, by which we are gradually adopting what has been termed the "factory" system of social and economic living—the specialization of interests and division of labor.

But, on the whole, when anyone presents to the teachers of the nation an idea such as that suggested by the subject of this paper, it is not at all strange that he should be regarded as were the Greeks who came bearing gifts—with suspicion. Therefore, to disarm any such suspicion that may have arisen in the minds of my readers on account of the suggestion contained in the title of this paper, let me state at the outset that it is not the purpose of this article to advocate the addition of another subject to the

curriculum of the school. I have no new duty to urge upon the teachers nor any far-fetched theory to promulgate. True, I am to discuss "Forestry and the Public Schools," but I am free to admit that, as such, forestry has no place in the public schools.

To secure a technical knowledge of forestry, one must take a course which is almost equivalent in point of time required to that of other professions, such as law and medicine. The better forest schools, such as those at Harvard, Yale, and Michigan, maintain high standards as to entrance requirements, and the courses extend over periods ranging from two to four years. If, therefore, it should be advocated that forestry should be taught in the public schools, arguments of equal strength might be advanced favoring the introduction of the study of engineering, medicine, or law into the common-school courses. Obviously, then, it would be unreasonable to contend that forestry, as such, deserves consideration as a separate study in the high school, much less in the common school. Few, if any, of the boys who drop out of the public schools before graduation from the high school ever take up the profession of the forester. The "people's college," as the high school has been called, should seek to serve the specific needs of those who come to it for training. There is no justice in imposing upon the great majority tasks which will benefit only the few. Those students in the common schools and the high schools who desire to become professional foresters must do the same as those who expect to become doctors and lawyers—wait until they can enter the technical school for the necessary training in their chosen professions.

But there is another side to this matter which we have thus far overlooked. While nowhere in the curricula provided for our common and secondary schools do we find courses in medicine or law outlined, yet every school teaches physiology, hygiene, and civics, and physics. Here we find the elements of the broader subjects of medicine, law, and engineering. Everyone recognizes the fact that these elementary subjects are of such vital importance to the ordinary citizen that every man and woman should know the principles which they embody. How far is this true of forestry? Has forestry any place in the public-school course, not as a technical subject to be taught with a view to preparing the student to gain a livelihood, but because of its broad informational and cultural qualities? If so, where should it appear, and how may it be taught without further adding to the burdens and intruding upon the precious time of the busy teacher? These are the questions I wish to discuss for a few moments.

It has been said by Herbert Spencer that "education is preparation for complete living." I take it that in order to be prepared for a complete life, a student should have knowledge including at least these three elements: (1) He should be as familiar as possible with the natural phenomena with which he is surrounded, that he may, in accordance with the divine command, "take the earth and subdue it." (2) He should also learn of the

activities of his fellow-men, and of the processes by which they secure their existence and their enjoyments, and of the difficulties and problems that confront them. (3) Finally, he should be equipped, by special training in some trade or profession, to support himself, and thus to become a useful member of society and a contributor to the general welfare. Let us see, then, how far forestry may contribute to the training required for the full life every well-informed citizen should lead.

The tree has long been a favorite subject for study and a prolific contributor of illustrative material for nature-study classes. But too frequently these studies have taken the form of mere botanical classifications of leaves according to shape, veining, and margin; or of fruits, as to structure. Such studies, to my mind, tend to deaden the interest of young students rather than to stimulate it, if it were not that in many instances the monotonous features of the work are offset by the opportunity given the collector's instinct so characteristic in all children at certain ages, and by the mere pleasure of handling things so evident in young children.

The forest undoubtedly is one of the earth's natural features which, in one form or another, forms a part of the environment of most school children. The trees are the largest specimens of the plant kingdom, and perhaps wider in their distribution than most other kinds of plants. For this reason the forest is almost universally available for study. It is seldom, however, that the real value of studies of the forest is appreciated and developed purposefully by the teacher. The tree, alone, is undoubtedly a splendid subject, but sometimes we see so many trees that we lose sight of the forest. We look at individuals and fail to get the broader conception of the community. If a newspaper correspondent were sent to write up a village famous for the community life of its people and should confine his report to a series of statements as to the height, weight, complexion, and dress of certain individuals in the community, he would not be making a more obvious mistake than does the teacher who asks her pupils in primary grades to remember that the horse-chestnut has leaves with "seven obovate, abruptly pointed, serrated leaflets." Such descriptions are necessary, possibly, for scientific exactness, but scientific exactness is not to be required of children in the grades. You will have accomplished more for the practical education of the child if you teach him to sort over a pile of leaves and to say instantly upon seeing them, "This is a horse-chestnut leaf," or, "This is a maple leaf," even if he cannot tell you at first just how he is able to identify each one.

But to get back to the real question at hand. There is a greater reason why pupils, even in the grades, should study the forest. There are certain great problems constantly before the people of any nation with which every well-informed citizen should be familiar, such, for example, as the great questions of government, of politics, of economics, and of religion, which concern each individual member in any social system. Prominent among

the great problems with which the people of the United States have had to deal in recent years is the question of how to conserve the natural wealth of the nation. Among the resources from which this wealth is drawn, the forest occupies a prominent place, not only because of the great value of its commercial products but also because the standing forests themselves exert a great influence upon the soil, the water supply, and even the atmosphere of the continent. In this respect, the forest occupies a place unique in Nature. The effects of the forest in checking the run-off surface waters; in assisting the percolation of this water thru the strata of the soil; and consequently in regulating the flow of streams, are facts with which every public-school pupil should be familiar. Again, every student should know the important facts concerning the influence of the forests upon soils; how the roots of the trees penetrate the lower subsoils, absorb the disintegrated mineral substances, and send them up to be built into the leaves as organic matter; then, when the leaves fall, we find a rich coat of humus deposited on the surface of the ground to add to the fertility and value of the soil. As if this were not enough, the trees go still farther in this great improvement work, and on steep hillsides their clinging roots are instrumental in preventing the removal of this soil by erosion.

Space will not permit, here, a discussion of all the things the trees do for us, such as beautifying our homes and protecting them from winds, cooling the air with their shade, and purifying it by the removal of the carbonic acid gas. I wish, however, before leaving this point, to call attention to the tremendous extent to which commerce and industry are dependent upon the forest. I have mentioned the importance of the forest in regulating stream flow. Of course, dependent upon steady stream flow are almost unlimited possibilities of water-power development and of utilization of streams for transportation—possibilities as yet, to a large extent, scarcely realized. How essential it is that the future citizen know of these things if he is to make the most of the opportunities for financial success that are before him! Then consider the commercial product derived directly from the forest—the vast quantities of logs sawn each year for lumber; whole acres of spruce forest ground up for woodpulp for paper manufacture; thousands of barrels of pitch, turpentine, and rosin, drawn from the southern pineries; maple sugar and syrup, produced in the "sugar bushes" of the Northeast; together with a thousand minor products which daily crowd the markets of trade—all, with the activities they represent, are features which no student of geography, of arithmetic, of economics can overlook, even if he does not realize their connection with forestry.

There is still another reason why forestry forms an essential part of the work which should be given in our public schools. Of recent years, far-seeing statesmen and educators have been impressed with the necessity

of encouraging the young people of our rural communities to stay on the farm instead of abandoning it for the city office or store. The foundation of our nation's prosperity is the farm. Our land is adapted especially to the pursuit of agriculture. Our educational system has begun to recognize this fact, and thruout the land we have begun to find agricultural high schools established, the avowed aim of these schools being to train the boys and girls for life on the farm. To me, it is strange that so few of these schools devote any attention to the farm wood lot in their courses. Thru the East and South we hear of abandoned farms—abandoned because the soil had become so poor that nothing would grow in it. Yet on most of these abandoned farms something will grow and, in fact, on many of them, something is growing. The forest is reclaiming them, seeking to make profitable again what man has rendered unprofitable. Certainly no one would be so visionary as to advocate planting all the abandoned farms in the country to trees, for most of these farms might still, with proper management, be made to yield annual crops profitably, but it is none the less a fact that on every farm, no matter if the soil is good or poor, there is room for a wood lot. Every farmer, therefore, should be familiar with the principles of wood-lot management, that he may be the better able to secure a livelihood to the best advantage. And for this reason, forestry has an important place in our high schools, at least those where agriculture is taught. Most of the writers of textbooks on agriculture for secondary schools recognize this, and we shall find in many of these texts, chapters on forestry. Most of these chapters, however, miss the point somewhat, for they deal with the subject in its broader aspect, while the way in which it should be treated, in order to give the best results, would be to consider the trees of the wood lot as a farm crop, to be managed, harvested, and marketed just as is done with the other crops of the farm.

I have endeavored in this discussion to point out the way in which forestry can be and should be taught in the public schools—not to supplant any subject, but to supplement many. The spirit of forestry is service, and the subject is willing to efface itself and, if need be, completely lose its own identity in order to render the other branches of the curriculum more interesting and helpful.

REPORT OF THE COMMITTEE ON COURSES OF STUDY IN AGRICULTURE

E. C. BISHOP, SCHOOLS SECTION, EXTENSION DEPARTMENT, IOWA STATE COLLEGE, AMES, IOWA

Lack of funds to properly prosecute the work of the committee has limited action to a considerable extent. Of the committee membership of six, only three have been able to meet at any one time. Reports from all members have been received. These reports either have been incorporated

in the general recommendations, have enabled the chairman to compile a consensus of opinion on some points, or are here appended as subcommittee reports on which the committee, as a whole, has not had opportunity to take definite and specific action other than the inclusion of such as a part of the general report with some references thereto. Some points of disagreement remain. The report is presented in its present form to show progress and open the way to discussion at the annual meeting of the department.

In the report of the committee at the San Francisco meeting of this department, statement was made to the effect that the establishment of right courses of study in agriculture was delayed and obstructed by the following conditions:

1. We need a readjustment of elementary science teaching and courses of study in science.

2. We need an organized correlation of agricultural topics with other branches of study.

3. The other public-school sciences cannot give complete treatment of agriculture; we need a separate place in the course of study for such overflow collateral work as does not find satisfactory treatment with other subjects in the program of studies.

4. Pedagogy needs to recognize some new values which are concerned especially in the teaching of agriculture. Such recognition will be worth as much to pedagogy and to the teaching of some of the traditional subjects as it is to agriculture.

The committee again affirms these statements, and to some general inquiries we submitted at that time for the suggestions they might carry, answer is now made as follows:

1. Use the topic development method, giving proper attention to pertinent relative matter.

2. The text in the hands of the pupil should be for reference only, and should be used when necessary as a means of supplying desired reading-matter which cannot otherwise be supplied to advantage.

If only one or two semesters of simple work are offered and especially where the teacher has not been well trained, a good general text in the hands of pupils may sometimes be used to advantage as a guide with these cautions:

a) Remember that books are merely aids and that the study of agriculture is primarily a study of things, not of printed matter.

b) Omit such portions of the text as are not pertinent to local agriculture or to necessary general knowledge of the subject.

c) In those topics which are pertinent to local agriculture amplify beyond the contents of the text by the use of other materials and references.

3. Follow leading topics in order and to the extent local importance justifies. Relate other topics to these.

4. Make topics seasonal and sequential whenever possible; correlate at all points where it will add materially to the interest, knowledge, and practice factors in agriculture and where it will vitalize the subjects with which correlated.

5. Geographic control and local interest should receive first consideration in the selection of units of study.

6. The order of phase-development should generally be:

a) Local interest and importance.

b) Economic value.

c) Cultural development.

7. Agricultural topics included in other subjects taught should receive local application whenever considered. Where such topics are largely agricultural in application, they should, whenever possible, be taught under agriculture as a separate subject.

8. In an agricultural community, agriculture should form the basic subject around which the course of study should be organized.

9. Agriculture, as a basic, introductory, elementary science, should consider especially the application of the phases of the other sciences, as applied to local application of the simple scientific principles involved.

Following are the subcommittee reports with appended discussion relative thereto; and some general suggestions relating to courses of study in agriculture.

SUBCOMMITTEE REPORTS

A. THE HIGH-SCHOOL COURSE IN AGRICULTURE

JOSIAH MAIN, PROFESSOR OF AGRICULTURE, WESTERN STATE NORMAL SCHOOL, HAYS, KANS.

Motive of agriculture in the high school.—Vocational interests are born early in adolescence. In the former non-vocational high schools they were permitted to starve for lack of nourishment so that the relatively few pupils who were able to survive a four-year course, not being average normal individuals at the beginning of the course, were less so at its close, the instincts upon which vocations are based having perished for lack of exercise. It should be the business of the secondary school to seize upon and feed these nascent instincts by properly prescribed school work. This is becoming increasingly necessary to the economic good of the individual and of the state. And inasmuch as the manual vocations of earlier generations furnish the physical and mental activities which shape muscle and mind of the world's leaders for later, it is of the highest importance in the interest of racial virtue that this source of civic strength be idealized and that its hardships be ameliorated by practical application of the sciences to the vocations. These motives are eminently moral and justify the inclusion in the curriculum of every high school of that most permanent and fundamental of the vocations—agriculture.

Correlation with the sciences.—"It is the business of secondary education to raise all subjects which it touches to the plane of science." To be made scientific, agriculture must utilize and be closely correlated with the physical and biological sciences, especially botany and chemistry. At the same time these sciences have their own particular ends to achieve. These courses in science and agriculture are formulated in the conviction that, to a large degree, the interests of both agriculture and the sciences are best subserved by a correlation whereby agricultural materials and problems are made the means of teaching science for science's sake as well as for the needs of agriculture. This necessity diminishes with advancing years, permitting a gradual divergence of the scientific and the vocational courses.

Motive of high-school science.—Unlike the humanities, scientific knowledge has little conventional value. It is very important from the standpoint of the high-school student that his science instruction have a definite purpose that he can appreciate and that it deal as much as possible with familiar materials. Experience has proven that biological sciences are best introduced thru an economic appeal. This means its correlation with agriculture and domestic science. This introduction happily achieved, many may elect to continue the science in its more systematic form, while those not interested in its organization may have acquired the information needful to their practical or vocational purposes. Utilizing vocational subjects has the advantage of making the student of science an active factor in the outcome of the situation under investigation, where, by former methods, he is only a passive observer. Such experiences in control disseminate the science of the school into the community and lead to a social efficiency in human affairs that alone

justifies making the expense of education a charge upon the public. Purposeless science has no place in the high school.

Rational hygienic practices are not to be acquired from the mere study of books and precepts. Present-day reforms suggested by such terms as public health, food economy, conservation, sex science, and eugenics depend for their future progress less upon theoretical moral motives than upon practical scientific means. Their success is the peculiar province and inspiration of the science department. The modern science of education is written in terms of biology and evolution—matters that can be properly appreciated only by one who has studied protoplasm first hand in its various forms and activities. The scientific method, originating with the natural sciences, has reformed the entire curriculum by the enforcement of the laboratory idea on every subject, and the former will always be the appropriate training for that method. The organization of any science tends to isolate it from all others. The utilization of science in the industries bridges the gulfs that have grown between the sciences, bringing about a much-to-be-desired "unity of science," and promises to be the salvation of the sciences to the high school.

Sequence of sciences and agriculture.—So far as the two are correlated the sequence observed in the presentation of agricultural topics will be the same as that found most suitable for the sciences. And superior to both of these subjects the physical development of the child, and the psychological development, of which it is a reliable index, dictate, so far as ascertainable, the character of the appropriate school exercises in these subjects.

Seasonal sequence.—The vocational and scientific character and topical sequence of the work having been provided for, pedagogical and practical needs are best subserved by a seasonal presentation such as to make each topic the subject of study in the school at or shortly preceding the time when it is at high tide of interest in the farm home. Besides its valuable training in vocational punctuality, the anticipation of the season is invaluable in this subject that is so dependent upon local support.

Other correlated subjects.—Other subjects correlated with the agricultural work are freehand drawing and arithmetic. The need for drawing as a means of expression and record in the making of agricultural notes is a strong incentive which set exercises in drawing may sometimes lack, while the subject, agriculture, greatly profits from the character given it by such drawings. Similarly, arithmetic both gives and receives great benefit by being utilized to give exact character to principles that have quantitative relation.

Extra-program activities.—Owing to its manual character and to its attempt to utilize what the home and the community afford, agriculture should only to a limited extent be made a formal subject. Much of its exercises must be extra-program. These may be classified as excursions of observation, home projects, and community services. Excursions are undertaken to view herds, machinery, orchards and gardens, and field operations. A home project is a student's selected individual undertaking of vocational character in which are sought to inculcate the scientific study of the problems connected with the project, which may be a cow, an orchard, a field crop, or a flock of poultry, etc. Besides exercise in the application of science to the solution of a practical problem, the taking of data, and the recording of results, the student is expected to keep a complete financial accounting and to endeavor to demonstrate the economic possibilities of the project. Community services have for their purpose the development of social efficiency in the student. The exercises affording practice consist of pruning, spraying, budding, testing seeds, milk, and foods, identification and control of pests, and many others. Much attention should be given to these extra-program features of the agricultural work and they should be interpolated at the appropriate time in the various agricultural topics.

Two classes of students.—The agricultural work of the high school is for two classes of students. First are those whose interest is primarily in the vocation of agriculture which they expect to pursue after completion of the course. These give the dominant character to the work necessary to make it a suitable training for the second class, who

pursue its courses for their more general scientific or preparatory value. This second class are not expected to divert it from its former purpose, else they may thereby impair the latter.

Work offered.—The courses offered are: field crops, 10 weeks, animal husbandry, 20 weeks, horticulture, 20 weeks, foods and fertility, 20 weeks, farm mechanics, 20 weeks, and a 10 weeks' course in agriculture synthesizing all previous courses into a "science of agriculture." Besides these, soil physics is taught in connection with physical geography, economic plant structures in botany, economic insects as a part of zoölogy, bacteriology, and sex science in the study of cryptogamic botany, and heredity, variation, and selection

COURSE IN SCIENCE AND AGRICULTURE FOR HIGH SCHOOLS, ILLUSTRATING CORRELATION AND MOTOR AND SEASONAL SEQUENCE

	1st 10 Weeks	2d 10 Weeks	3d 10 Weeks	4th 10 Weeks
First Year	PHYSIOGRAPHY AND ELEMENTARY PHYSICS S.A.			
	earth structure, weathering, stream action, soils, specific gravity, texture, capillarity, moisture control, tillage.	land forms, physiographic regions, relief models, topographic maps, soil survey maps, soils of state.	air, water, heat, mechanics of gases and liquids, climate, weather, principles of machinery, household physics.	ocean, earth relations, geographical distribution and production, geog. influences, soil temperature, control.
	Field Crops (see 4th year)	*Animal Husbandry* (see 4th year)		Begin projects (see 4th year)
Second Year	BOTANY S.A.		HORTICULTURE A.	
	morphology of root, stem and leaf, flowers and fruits, recognition of 12 economic families, fertilization, control. (breeding)	minute structure of root, stem and leaf, physiology of phanerogams, seed structure and germination, osmosis, metabolism.	graft, bud, prune, spray, plant, cutting, layering, hotbed, cold frame, seed identification, purity, viability, and control.	gardening, variety tests, culture methods, economic production, pests, accounts. nature-study (?)
Third Year	ZOÖLOGY, Invertebrate		BOTANY	
	S.A.	S.	S.A.	S.
	economic insects, life histories and control, earthworm, other economic forms, parasites.	type studies, systematic zoölogy, protoplasm, natural selection, parasitism, reproduction.	bacteriology, contagions, and control, hygiene, economic forms, yeasts and molds, soil bacteria.	cryptogams, life cycles, systematic and evolutionary, sex science.
	CHEMISTRY S.A.		FOODS AND FERTILITY A.	
	laboratory, text, and theory		feeds and rations, food tests and problems, calorimetry, carbon cycle, making rations, local forage crops.	fertility, lab. and theory, nitrogen cycle, rôle of humus, field and pot control, problems, conservation.
Fourth Year	FARM MECHANICS A.		ANATOMY AND PHYSIOLOGY Comparative S.	
	blacksmithing, pipe fitting, concrete work, leveling tractors, gasoline engines, pumps, implements, buildings, draughting, and problems.		vertebrate type studies, skeletal, muscular, digestive, respiratory, circulatory, nervous, reproductive, tissues, variation, inheritance, eugenics.	
	FIELD CROPS A.	ANIMAL HUSBANDRY A.		AGRICULTURE A.
	corn, wheat, cotton, all others, (take three including corn) variety, quality, culture, pests, composition, products, economics.	dairy, beef, horse, swine, sheep, poultry, (take four including dairy) origin, breed, conformation, quality, score card, judging, adaptation, care, production. PHYSICS S.		system, equipment, capital, balance, rotation, economy, excursions, community services, home projects and theses.

in human physiology. The first three courses are offered without any previously required science work. The others require a study of correlated sciences to precede or accompany them. Field crops and animal husbandry are repeated in the last year of the course so that they may be reviewed in the light of the sciences that have intervened between that and their presentation in the first year of the course. If to these regular agricultural courses be added the agricultural work incorporated in the science courses, it amounts, exclusive of the purely science courses, to one-fourth of the time of the high-school student, in his four-year high-school course.

NOTES ON THE COURSE OF STUDY

Subjects prescribed to science students are indicated by the letter *S;* to agricultural students, by the letter *A*. The two courses are seen to coincide in much of their work in the early part of the course and to gradually diverge toward vocational agriculture and more technical science toward the latter part. The agricultural course is planned for students whose training is limited to the high school. The science course is suited to students who elect a general course or a college-preparatory course. It is not the agricultural work but the science courses so modified as to correlate with the agricultural that constitute the preparation for the agricultural or other college. In choosing electives the student of either course may well elect so as to make them still further coincide.

The course is shown in ten weeks' units so as to indicate the necessary seasonal sequence of subjects. Physiology and farm mechanics being independent of this sequence are interchangeable in position.

Where a science subject is followed by its application in an agricultural subject the order of presentation here given should be preserved. Horticulture, field crops, and animal husbandry of the first two years are independent of any such requirement. These subjects are open to short course agriculture students; and since every high school contemplated by this course must prepare to train rural teachers, these may also constitute training courses for teachers.

The work of assembling materials for the courses of field crops and animal husbandry, the fact that the beginner needs these subjects to stimulate his nascent vocational instincts, while the fourth-year student needs a review of them from his scientific viewpoint, the fact that the materials viewed in the fourth year will not be identical with those viewed by the same student in his first year, and that too few samples or individuals will, at best, be seen by the student, make it advisable to present those courses to first- and fourth-year students simultaneously. There are good reasons why all parties concerned may profit from a union of classes tho not by an identical requirement for completion of this work.

It is understood that a maximum of laboratory work will be undertaken in all of these subjects.

One period each week thruout the first year should be given to freehand drawing, using the materials supplied by the work in agriculture, physiography, and elementary physics. This time may be taken out of that allotted to elementary physics and physiography and special attention given to notebooks in that subject.

Problems in arithmetic, which alone can make definite the nature of quantitative factors, should be developed wherever practicable. Applications of percentage occur in humus and moisture determinations, milk and seed testing, composition of feeds and fertilizers; proportion is developed in laws of gases and liquids, specific gravity, laws of machines, chemical equations and calorimetry; angular measurements in earth relations and leveling; mensuration in farm mechanics; alligation in prescribing rations and fertilizers; accounts in projects, gardening, and general agriculture; curves and statistical methods in physiography, government reports, and heredity.

The home project may be any agricultural undertaking within the resources of the student, chosen early in his course and pursued to the last year, where it is formulated in a graduation thesis showing practical and scientific factors involved and how they were

controlled, with a complete financial accounting. Its aim is to develop ability to apply school learned knowledge outside the school, to acquire original knowledge in the only method by which human knowledge may be acquired, and to gain experience in the control of forces which make the individual efficient.

Community services belong to the entire field of science and agriculture and are a combination of practical sociology with practical science. Students of the various courses should undertake such services at all appropriate occasions and they cannot be written into the course or program. They consist of tests of weight and quality of any article bought or sold in the community; testing seeds, milk, textiles, microscopic and chemical tests of foods, fertilizers, and spray compounds; identification and control of pests; excursions for pruning, grafting, spraying, landscape work, and many others of similar nature. Their aim is social efficiency.

Attention is called to the method of introduction to the several sciences thru an economic appeal, followed later by scientific organization.

This course is thought suited to any high school in a city of less than 10,000 population. The two- or three-year high school should cover the first two years of this course, making a straight year's work of the field crops, animal husbandry, and horticulture. It is believed that this course is translatable into the credits or units with which school men are familiar, and that it is general enough in its application to fit any locality in the United States in which agricultural work in the high school is feasible, with an allowance of not more than 10 or 15 per cent for local differences.

The above subcommittee report is included here as a carefully worked-out plan of determining the course in agriculture in accordance with the requirements of seasonal sequence in relation to the high-school sciences, keeping in mind the psychological development of the child thru his progressive motor developments.

If "the child's mind and body, rather than the material, should be the controlling factors that determine courses of study"; if "interest in vocation is born in adolescence"; if "the manual vocations normally precede the others"; and if "crude, rapid work must come before refined, painstaking, delicate work," we must interpret the foregoing outline course to indicate that under "principles of machinery" and "household physics" of the first year there will be included such crude, general elementary work as will provide the needed training in motor activity and vocational direction at that time and that the fourth-year work in farm mechanics will provide the more refined, painstaking work adapted to the later psychological development.

A question is raised also as to the assignment of "project work" to the first year of the course, for the reason that the average beginning high-school child is not mentally prepared to plan out, or to appreciate when planned by others, a methodical plan of secondary investigation work, and that if the planning must all be done at this stage by the teacher, the value of the work does not differ much from that to be had in ordinary school and home garden work which ought to be assigned to grades below the high school. If the project work is begun in the first year, it may well be confined to demonstration work which is within the capabilities of the child but the nature of which leads out beyond the simpler work of the garden.

The course of study worked out for New York state by C. L. Howe has a definite sequence in the arrangement of the courses in animal husbandry. In this, the poultry course is given first place in the last half of the second year, and is followed in the third year by a general course in animal husbandry exclusive of dairying and poultry husbandry. The third year's work is followed by a full year's work in dairying, running thruout the fourth year. Poultry husbandry, the simplest of the studies in animal husbandry, is rapidly gaining ground as a strong introductory topic to the course in animal husbandry. This is true especially in the smaller school where the teacher is a woman, or where the facilities for the study of livestock other than poultry are not most favorable.

The foregoing subcommittee report and references thereto are submitted as a basis for discussion and as an indication of the work the committee has under way for definite recommendation later.

B. AGRICULTURE IN THE RURAL SCHOOLS. COURSE OF STUDY

B. M. DAVIS, PROFESSOR OF AGRICULTURAL EDUCATION, MIAMI UNIVERSITY, OXFORD, OHIO

Some guiding principles.—A minimum course of study in agriculture for the rural schools should take into consideration, at least in part, the following: selection of units of instruction; organization (amount of time at disposal for various subjects) of the average rural school; use of material within teacher's range of experience or knowledge; attitude of patrons of the school toward agriculture as a school subject; the importance of concrete experience on part of pupil; possible correlations with other school subjects.

The average school is not now ready to cover the whole subject of agriculture, even in an elementary way. For this reason, the subject should be broken up into units of instruction, each unit being more or less compact in itself. The selection of these units should be based mainly upon the dominant agricultural interests of the community, but may be determined in part by the teacher's knowledge or interest in the particular topic.

Time may be provided in several ways: by arranging the units selected into some system of rotation so that no pupil will go over any phase of the subject more than once unless in some new association. In arranging the units of instruction for all the grades, three groups may be recognized:

Group 1, including grades 1–3
Group 2, including grades 4–6
Group 3, including grades 7–8

In the first two, the nature-study aspect of the subject should predominate and may include a number of small units. In the last, rather large but definitely agricultural subjects may be selected. Time may also be gained by having various home projects and by making agriculture furnish material for other school subjects.

In order that agriculture should make its best contribution in the work of the school, the subjects chosen should not only be those in which the community is interested, but should also be possible of actual practical application in improving local agricultural practice. In this way the school will receive its best support from the community.,

No unit should be included in a course of study that does not admit of the pupil's actual contact with materials, i.e., with animals, plants, soils, and, so far as possible, with actual agricultural practices. The various correlations of each unit with other school subjects should be carefully arranged for. This will not only be of mutual advantage to all subjects concerned, but will help remove some of the difficulties arising from lack of time.

UNITS OF INSTRUCTION

The course of study may be made up from the following:

Group 1.—Common birds, trees, weeds, insects, simple garden operations, etc. Data should be gathered for use in later study.

Group 2.—The same units as in Group 1, but each unit being presented in form of a problem involving activity on part of pupil, for example, weeds, collecting weed seed, and determining the ones commonly found in commercial seeds.

In addition, certain phases of the units in the suggested list for Group 3, may be used, for example, testing germinating value of seed corn.

Group 3.—Animal husbandry (certain phases of stock judging, etc.); farm crops; soil studies; gardening (school and home gardens); dairying (especially testing milk); insects; seed testing; horticulture; poultry; forestry; weeds; birds; work of plant (how it lives, etc.); fertilizers.

The particular plan of these large units should be selected according to principles already suggested, with particular reference to the dominant agricultural interests of the community. For example, farm crops may be studied anywhere, but whether corn or cotton should be studied must depend upon the geographical location of the school, or on local agricultural importance of crop.

AGRICULTURAL TOPICS AS ACTUALLY TAUGHT IN SOME RURAL SCHOOLS

It is intended that this part of the report should be based chiefly on an investigation of successful practices now actually in operation in rural schools in various parts of the country. Thru correspondence with state departments of education, with departments of agricultural education in agricultural colleges, with county superintendents, and with others interested in agricultural education, a list of about eight hundred names of successful teachers of agriculture was obtained. From this list six hundred were chosen, representing every section of the country. To each of these was sent the following questionnaire:

Kindly fill out and mail in addressed envelope.

1. Do you regard it desirable to cover the whole subject of agriculture in an elementary way with pupils below high school?
2. Or do you regard the plan of selecting certain units or topics, such as corn, milk, poultry, plant enemies, etc., more desirable?
3. Give list of topics that you have found or regard as most successful.
4. Is home-made or school-made apparatus used? If so, give examples of some used to best advantage.
5. To what extent has outdoor field work been used successfully? State nature of the work, subject, and approximately the amount of time spent.
6. To what extent have farm animals been used in teaching, i.e., actual study of the animals themselves?
7. How did you manage this animal study?
8. How much experimental work on school grounds or in building have you done?
9. How was this experimental work managed?
10. To what extent have you made use of borrowed apparatus, such as farm machinery, scales, milk-testers, etc.?
11. To what extent has the work in agriculture been a practical success judged by application at home, and in approval of patrons?
12. In what ways has agriculture been correlated with other school subjects?
13. Has it helped instruction in these subjects?
14. Mention some difficulties you have met with in the teaching of agriculture.
15. What has been your guide in selection of topics or units for instruction, i.e., teacher's manual, textbook, community interests, etc.?
16. Will you suggest on back of this sheet some things that should be included in a course of study that would be most helpful to a teacher?

*Name*_____ *Address*_____

About three hundred have thus far responded with full answers to the questions, and many have given valuable information not suggested by the questions. The data

of these answers need further tabulation and study. Only a very brief partial summary can now be presented.

Whether an attempt should be made to cover the entire subject is, perhaps, a debatable question. Yet it is one that should receive first consideration, for a satisfactory answer will determine largely the nature of the work undertaken. About one out of five teachers reporting favor covering the entire subject, but most of these qualify their statement by saying they would emphasize certain phases and pass rapidly over others. The great majority of teachers reporting, prefer to select certain units and confine instruction to these. There can be no pedagogical objection to this. After all, it is only in actual agricultural practice that the various more or less unrelated units are brought together in a system of farm practice, and these differ according to the degree of specialization. At present it would seem enough to expect that instruction be given in certain units only, but chosen with special reference to the interests of the community. The subject is then more likely to be well taught and to find favor with the patrons. It must be remembered that agriculture is not to be taught merely as an additional school subject, but that it should help raise the value of the school in the eyes of the community. The latter point is very important in view of the indifference of much of the rural population to education.

If by testing milk for the farmers of a neighborhood, the school can show the advantage of better breeds of dairy cattle and thus increase the value of dairy products of the community, there is, besides the educational gain to the pupils in working out this problem, a closer bond established between the school and its patrons. This added interest may develop into better support and greater educational facilities. It is in some such way as this that agriculture as a school subject has its greatest opportunity.

Almost all phases of agriculture have been successfully introduced in an elementary way into the rural schools. A partial examination of the answers to the questionnaire shows the following list of subjects to have been taught successfully. The subjects appear in order of frequency of mention in answers.

Animal husbandry (certain phases of stock judging, etc.)
Farm crops
Soil studies
Gardening (school and home gardens)
Dairying (especially testing milk)
Insects
Seed testing
Horticulture
Poultry
Forestry
Weeds
Birds
Work of plant (how it lives, etc.)
Fertilizers
Crop rotation
Drainage
Forage crops
Farm roads
Farm management (especially accounts)
Useful wild animals (e.g., toad)
Weather
Rope splicing
Plant diseases
Plant propagation
Dry farming

Of these the first twelve seem to be in most favor. The list indicates that the basis of choice is largely community interest. Indeed this is so stated by many of the teachers.

The committee presents this simply to indicate the nature of the investigation now in progress and as preliminary to a full report to be submitted later. The final report will present the results of the material now collected, together with a consideration of various

factors which should be taken into consideration in determining a course of study, and will also include a suggestive outline with helps to teachers for work in agriculture adapted to the needs of the average rural school.

C. ON A MINIMUM COURSE OF STUDY IN AGRICULTURE FOR RURAL ELEMENTARY ONE-TEACHER SCHOOLS LOCATED IN AGRICULTURAL COMMUNITIES

RILEY O. JOHNSON, DEPARTMENT OF BIOLOGY AND AGRICULTURE, STATE NORMAL SCHOOL, CHICO, CAL.

THE NEED FOR A MINIMUM COURSE

The necessity for a minimum course of study in agriculture lies in the following facts:

1. Any complete course of study in this subject, because of the multiplicity of topics which it would contain, would tend strongly to discourage the great majority of teachers who are yet not thoroly acquainted with the materials of the subject nor with the literature bearing upon these materials. Such a course would of necessity contain a great many topics of which most teachers are either entirely ignorant, or with which they are at best only more or less remotely acquainted. Moreover, the literature bearing upon these topics is so scattered that it can be brought together only with considerable difficulty and expense of time and effort, and even when once collected, is very difficult of organization, either because of its fragmentary or technical character, or both.

2. The somewhat intensive study of a few topics will result on the part of the pupils in a deeper and a more sustained interest and in the acquirement of greater strength than the necessarily more superficial study of a considerable number of topics.

3. Such a course can more easily be adapted by teachers unskilled in the teaching of agriculture to the needs of their particular localities.

4. In following such a course, the likelihood of the teacher's spending unnecessary time on relatively unimportant topics is reduced to the lowest minimum.

5. A minimum course is sufficient to utilize all of the time which can possibly be found for agriculture at present in the already overcrowded curriculum of the rural school. Thus a good beginning of the work will be assured and the course can be expanded in response to the demand for more time for this subject.

WHAT A MINIMUM COURSE SHOULD INCLUDE

This minimum course in agriculture should provide, first of all, for actual contact with the materials of the subject, i.e., with animals and plants and soils, and with, so far as possible, actual agricultural operations, especially so far as the latter may enter into the work carried on in the school garden. It should also provide for formal class instruction concerning these materials. In other words, the work in agriculture should embrace, so far as possible, actual experience with animals (at home) and plants (at school and home) and the formal lesson in classroom and field. In order to make it serviceable in practically any locality where agriculture could profitably be taught, such a minimum course should include animals and plants common to large areas, such as the domestic animals, beneficial and injurious insects, and other animals of economic importance and of wide distribution, the more common field-crop plants, and subjects of general interest in every locality, such as forestry and the weather.

One of the practical difficulties encountered in making a course of study in agriculture for rural schools, overcrowded as the curriculum now seems to be, is so to construct it that, while serving the entire school, it will call for a minimum number of classes; and further, so to arrange for its practical administration that no pupil passing regularly from grade to grade shall be required to unnecessarily repeat any part of the work. Another difficulty in constructing such a course is its adaptation to schools of any number of grades from the entire eight down to one. Since the rural schools quite generally have

at some time all the eight grades, it is well that the course be constructed mainly with reference to its use in such schools; and then, if possible, to devise some plan according to which it may easily be so modified as to fit it to schools of any number of grades less than eight.

In order to meet the above-mentioned difficulties, and to bring it within range of the teacher's ability properly to prepare for the regular recitation in this new subject, it is suggested that the school be divided into two groups for class instruction, tho the number of groups may easily be increased to three or more, if desirable. If it be deemed best or necessary to divide the school into two groups, the dividing line may be drawn between any two grades, to suit the convenience of the teacher and the needs of the school. The course of study (suggested below) is then divided into two sections corresponding to these two groups, and the section for each group is then divided up into as many parts as there are grades in that group. The parts are then given in rotation, one part being given each year, until every part in that section has been given in its turn. Each section is then repeated, in the same order, beginning at part "one" of the same section again. Such a course may very appropriately be termed a "rotation" course in agriculture.

WEAKNESS OF THE "ROTATION" COURSE

In a course so arranged and administered, it would hardly be expected that any strictly logical connection should exist between the parts into which the course is divided, tho it might exist between the units constituting a part; but the committee feel that the course would not be any the less valuable on that account. A further weakness of a course so arranged is that all the parts of the course in each section would have to be about equally adapted to all the grades in the group for which it was intended.

There are, however, among the topics suggested in the course below, few, if any, which may not be made to appeal strongly to any pupil of any grade in the elementary school, and in which his interest cannot be maintained while teaching the topic to others of widely varying ages; especially is this true if the more simple questions are directed first to the younger pupils and then referred to those successively older until answered. Also work correlated with the lesson and carefully prepared by the teacher beforehand, such as drawing, or modeling, may be given the younger members of the class if they should tire before the end of the recitation period. So long, however, as they do not tire, they should be allowed to attend to, and, so far as possible, take active part in the recitation.

ADAPTATION OF TOPICS TO GRADES

Since the younger pupils are usually more interested in things which are alive and moving, it would be well to give in the lower group a large part of the instruction pertaining to animals and animal life, and such work on plants as does not require or involve any but the very simplest discussion of physical and chemical facts, other relations being reserved, so far as it is advisable, for group two. For similar reasons, it would be well to emphasize more strongly the garden and other field work, especially the excursion work, with group one. Such excursion work should consist in a study, by direct observation out of doors, of all the main factors which influence directly the life of the plant and of the animal; such as the weather, birds, insects, insect injuries, insect enemies, weeds, plant diseases, soils, soil-making, transportation of soils, homes of animals, migration of animals, and so on. The gardening should include window gardening in boxes, pots, and cans, "eggshell farming," ornamental plantings on school grounds and at home.

The pupils of the higher group will, on the other hand, take a keener interest in such things as life-processes of animals and plants, and the chemical, physical, and biological activities going on in the soil and making plant life possible. For this reason, a series of experiments designed to be carried on both indoors and outdoors, at school and at home, and so arranged as to set before the pupil clearly and in logical order the life-processes of

the plant and the relation of the plant to the various factors of its environment, is recommended for this group. These experiments, together with their intelligent discussion, are intended to give the pupil a fair knowledge of the principles underlying all the common agricultural operations utilized in the raising of field crops, and a fair working knowledge of such topics as soil moisture and its control, soil biology in its relation to soil fertility, legumes and their relation to the nitrogen content of soils, fertilizers, crop rotation, irrigation, dry farming, and so on; and to interest them in, and enable them to read much of, the experiment station literature with profit.

In their field work at school, and so far as possible in their work at home, the pupils should be required and encouraged to put to a practical test the facts gained from the experiments and discussions and from their reading.

ADAPTATION OF THE COURSE TO SCHOOLS WITH VARYING NUMBER OF GRADES

The "rotation" course herewith submitted will be found applicable, as has been suggested above, to schools of eight grades, or any number of grades less than eight. Where each grade occupies a room to itself, the parts of the course may be assigned one to each room, and this part will then of course be repeated each year. Where more than one grade is present in a room, as many parts of the course may be assigned to such room as there are grades in the room, one part being given each year until all parts thus assigned have been given and then beginning again with the one presented first. Where the course is to be thus apportioned among two or more rooms, especially when the first six parts are to be so apportioned, topics may be shifted, at the judgment of the supervisor or principal, from one part to another, before the course is put into operation, so as better to adapt it to the different grades. The course may also be more closely adapted to the needs of different communities, by substituting for the things which are less common others which are of greater importance locally. But in any case where a shift or substitution is made, it would better be done, for obvious reasons, before the course is put into operation. It is advised that in teaching, the number of topics assigned to each part be diminished rather than increased.

SUGGESTIONS FOR A MINIMUM COURSE

SECTION I

PART I

1. Cattle, with special reference to the dairy cow
2. Wheat, or corn, or cereal raised in greatest abundance in locality
3. The honey-bee and bee-keeping to supply the family table
4. Fish and their relation to mosquitoes and other insects
5. Clothes moth and other household insects

PART II

1. Feeds, feeding, and care of domestic animals (include all not studied separately)
2. Alfalfa, or most important forage plant of locality
3. Crow, or most troublesome bird of locality
4. Mosquitoes and their relation to diseases of different kinds
5. Toad as an insect-destroyer

PART III

1. Chicken-raising with special reference to the laying hen
2. Tree study, and tree planting for shade and ornament
3. Seed and plant dissemination, especially as applying to weeds
4. The snake and needless fear concerning it
5. Insect pests other than those studied in connection with other topics

PART IV

1. The horse and how to take care of it
2. The home garden and its care and management
3. The ant and its relation to destructive insects
4. Forms of water and their work, with special reference to soils
5. Life in ponds and streams

PART V

1. The bush fruits and grapes for home use
2. Birds in their economic relations
3. The weather as a factor in crop production
4. The house fly as a coiner of disease; other flies
5. Gopher, or worst rodent pest of locality

PART VI

1. The fruit-orchard, home and commercial
2. Plant diseases, with special reference to orchards and farm crops
3. Butterfly, or moth, the species whose larva is most destructive in the locality
4. The earthworm and its work in the soil
5. The bat as an insect-destroyer about the home.

School and home gardens every year during gardening season.

SECTION II

(The study of all topics in Parts I and II of Section II, to be based upon experimentation)

PART I

The Plant and Its Relation to the Various Factors of Its Environment

1. Relation of the plant to water, air, light, warmth, and food, including a general view of the processes by means of which these five things are appropriated and used
2. The soil and its store of plant-foods
3. Conservation of soil fertility by growing legumes, by green manuring, and by crop rotation
4. Fertilizing of soils by means of farm-made fertilizers

PART II

The Plant and Its Relation to the Various Factors of Its Environment

1. Commerical fertilizers and rôle of bacteria in preparing plant-foods generally
2. How plants feed: acid and alkali soils
3. Forms in which water exists in the soil
4. Conservation of soil moisture by cultivation and dry farming methods

School and home gardens each year during gardening season

THE ADMINISTRATION OF THE MINIMUM COURSE

From what has been said above it will be seen that the aim is not necessarily to teach all the topics in any one part in one year. That matter is optional with the teacher. If the teacher is able to spend the time necessary in preparation, it would be better to teach but one topic (especially so in Section I) each year, and that particular one should be the one which is of greatest importance in the community. Attempting but one topic a year will simplify the matter of preparation for the teacher and will at the same time give the pupils the feeling at the end of the year that they really have a pretty good knowledge of at least one line of agricultural work. It would be better, perhaps, to omit none of the topics in Section II.

In the teaching of any topic, it would be best to arrange the order of presentation of subtopics according to the season, at the same time preserving the sequence so far as possible.

General observation work should be encouraged in every way possible all thru the years particularly with respect to birds and the weather. Bird and wild flower calendars and weather charts will help to maintain interest in this part of the work in the lower grades; in the upper grades written language work may be so assigned as to involve observation work.

For the sake of the younger pupils, in Section I, direct particular attention, in the study of animals, to the young. Also bring out humane methods of treatment as often as possible, as well as the animal's care of its own body.

THE COLLECTION OF INFORMATION ON THE TOPICS

The first step in the collection of information on any agricultural topic is always the first-hand study of the thing itself. Not until this step has been taken should the teacher seek help from others or from the printed page, and even when assistance is

sought from others, the facts thus gained should always be verified by a fresh observation so far as this may be possible. The patrons of the school and the children themselves will be able to give much information of the kind sought and such information should always be utilized. Many of the topics will be found treated in books, some of them very extensively, and some of them occupying an entire book or treatise. Others may be found treated at some length in textbooks on agriculture, especially in the *Encyclopedia of American Agriculture*. Information from these sources may be extensively supplemented from the bulletins, yearbooks, and yearbook reprints of the United States Department of Agriculture at Washington, and from the bulletins of the various state agricultural experiment stations. The pupils may be encouraged to bring in magazine articles, newspaper clippings, and items of interest, and the teacher herself will be able to find much valuable material in her general reading of newspapers and periodicals. Every new idea so gained should be filed away in systematic form so that it may easily be found when needed. To this file should be added any new bit of information gained, from whatever source it may come, and in each case the date of utterance and the authority should be carefully noted.

ILLUSTRATION OF MANNER IN WHICH TOPICS ARE SUPPOSED TO BE WORKED OUT

SECTION I

PART I

Cattle (especially the dairy cow):

I. *Needs of cattle* (as animals)
  1. *Food*
    a) Kinds and their production
    b) Feeding of different kinds of feed
    c) Precautions in feeding some kinds of feed
    d) Treatment of ailments due to lack of proper caution in feeding
    e) Time of feeding
    f) Amount of feed
    g) Uses made of body as food for man
    h) Digestive mechanism (also circulatory, respiratory, nervous, and excretory systems in relation to digestive system)
  2. *Water*
    a) Good and bad water for cattle
    b) Time of watering
    c) Amount of water consumed
    d) Comparison of amount taken by cow and horse
    e) Use of water by the body and various means of disposal after use
  3. *Shelter*
    a) Necessity—nature's protection of animals against the elements
    b) Relation of shelter to feed
    c) Types of barns, their light, ventilation, cleanliness
    d) Diseases incident to housing; their prevention and remedies
    e) Tuberculosis—its nature, cause, symptoms, dissemination, etc., comparing with the same in man
  4. *Protection other than shelter*
    a) From annoyance by insects, flies of various kinds, ticks, etc.
    b) From various diseases, tuberculosis, anthrox, and other common diseases
    c) From accidents, cuts, abrasions, broken limbs, etc.
  5. *Self-protection*
    a) From larger enemies and from other animals
    b) From flies and gnats
    c) From disease
    d) Body structures and habits as related to self-protection: dehorning
  6. *Humane treatment in the handling of cattle generally*
  7. *Domestication of cattle and wild cattle*
  8. *Types and characteristics of each;* beef, dairy, dual purpose, significance of characteristics (study each type separately)
  9. *Breeds* (distinct)
    a) Number
    b) Kinds or names of each of most common breeds
    c) Characteristics of each breed
    d) Origin, development, and history of each breed

e) Judging of each type of each breed; terms used in judging each type and their meaning (weight, form, quality, style, temperament, muzzle, eyes, face, forehead, ears, neck, shoulder vein, shoulder, breast, legs, chest, crops, ribs, back, loin, flank, hips, rump, pin bones, thighs, twist, udder)

10. *Feeds and feeding in case of each type*
    a) Rations—their advantage and computation
    b) Silos and their construction
    c) Silage crops
11. *Dairy farming systems*
    a) In their relation to feeds
    b) In their relation to soil fertility, especially to nitrogen content of soils
    c) Oriental customs of caring for animal wastes
    d) Rotation of crops in dairy farming
    e) Choice of location for dairy farm
12. *Care of the dairy cow*
    a) Feed
    b) Housing
    c) General treatment
13. *Keeping records of the dairy cow*
    a) Weighing and testing of milk; the Babcock test and its value
    b) Testing associations
    c) Weeding out of "boarders"
    d) Grading up the herd
    e) Relation of feeding and care of records
    f) Record yields
    g) Regularity in milking
14. *Handling of milk*
    a) Preparation of cow and milker for milking
    b) Types of milk pails
    c) Milking machines; their mechanism and relation to clean milk
    d) The separator and its value and use
    e) The clarifier, its value and use
15. *Preservation of milk*
    a) Ways in which milk is handled before reaching public
    b) Milk in its relation to the public health, especially infantile death rate
    c) Milk as a food
    d) Special precautions in handling milk
    e) Care of milk cans and bottles
    f) Certified milk
    g) Condensed milk and condensories
    h) Malted milk
    i) Laws relating to clean milk
    j) Cleanliness about the dairy
16. *Milk products and their manufacture*
    a) On the farm
    b) In special factories
    c) Storing and marketing milk products
    d) Extent of dairy industry
    e) Use of dairy products as food; preparation for the table
    f) Co-operation in dairying
17. *Fattening, shipping, and marketing beef cattle*
18. *Slaughter- and packing-houses*
19. *Waste products in butchering and their disposal*
20. *Cuts of beef*
21. *Use of beef as food* (including preparation for the table)
22. *The cattle-raising industry and world's cattle markets*
23. *Care of the dairy cow's calf*
24. *Swine-raising as a side line to dairying*
25. *Cattle in art and in history*
26. *Arithmetic of cattle-raising, dairying, and dairy-farming*
27. *Essays on the last-named topics*

ILLUSTRATIVE OUTLINES

Outlines of a few topics should be worked out very fully, so as to give as much as possible in the way of suggestions. Few teachers will find time to teach all the points in any such outlines, but they will nevertheless find it advantageous to prepare on all the

points. Other things being equal, the better one knows the topic in question the better will he be able to teach it. The outlines may be rearranged to suit the convenience of the teacher or to conform to the season, but it is desirable to preserve the sequence as far as possible. No part of any topic should be dwelt upon until it becomes stale and uninteresting. In case interest cannot be maintained in the study of any one point in the outline the teacher should pass on to the next.

A MINIMUM COURSE OF STUDY FOR RURAL AND GRADED SCHOOLS

Another form of the minimum course in agriculture planned for the rural and graded schools of Iowa carries out the idea of seasonal sequence of topics interspersed with the principal agricultural topic (corn) forming

ONE-YEAR COURSE IN AGRICULTURE FOR IOWA RURAL AND GRADED SCHOOLS

Topics	Number of Periods per Month									
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
Bees	..	..	..	..	..	..	..	3	..	3
Birds	..	..	..	..	..	..	..	3	..	3
Cattle	..	5	..	..	..	..	..	..	..	5
Conveniences—farm and home	..	..	..	..	..	..	..	4	..	4
Corn	7	3	2	8	6	5	4	4	3	42
Farm management	4	1	..	..	..	..	..	1	..	6
Feeds and feeding	..	..	..	..	..	2	..	..	..	2
Forage crops	..	2	..	..	..	..	..	..	..	2
Hogs	..	..	..	..	5	1	..	..	..	6
Home sanitation	..	..	..	..	..	..	..	..	6	6
Horses	..	..	..	7	..	..	..	..	..	7
Horticulture	5	..	..	..	..	..	9	1	..	15
Insects	2	..	..	..	..	4	..	..	1	7
Machines	..	..	..	..	..	..	..	..	4	4
Milk and its products	..	3	8	..	..	..	..	..	..	11
Oats	..	3	..	..	..	..	3	..	..	6
Plant growth	..	..	..	..	..	..	..	..	5	5
Potatoes	..	3	..	..	..	3	..	..	..	6
Poultry	..	..	9	..	..	..	1	..	1	11
Seeds	..	..	..	..	..	2	3	..	..	5
Sheep	..	..	1	5	..	..	..	..	..	6
Social life	..	..	..	..	..	3	..	..	..	3
Soils	..	..	..	..	5	..	..	..	..	5
Weeds	2	..	..	..	4	..	..	..	..	6
Wheat	..	..	..	..	..	..	..	4	..	4
Totals	20	20	20	20	20	20	20	20	20	180

the backbone of the course. This is a part of a correlation scheme making seasonal application of all work possible, and including work which may be presented about as well one time as another in what would otherwise be vacant periods in the seasonal, sequential development of the basic topic and other topics which are either seasonal or have sequential relation to such an extent that they would require a specific placing.

Accompanying this course of study is a correlation scheme suggesting some particular applications of the work in agriculture which may be used

to vitalize the work of the other school subjects and at the same time provide a means of developing necessary phases of the agricultural work which lack of time will not permit in the regular class work in agriculture.

It will be noted that 180 lessons are outlined, providing for a full year's work with five 30-minute periods per week for the school year of nine months. While only a limited number of the ordinary rural schools will be able to carry the complete course at any one time, the arrangement is such that only the basic topic, "corn," or any other topic or combination of topics, may be followed thruout the year with the lessons arranged in seasonal, sequential order.

Where shorter periods for the work are necessary or where fewer periods per week can be provided, the teacher is directed to select only such work as can be adapted under governing conditions. The topics are outlined in units which permit the taking-up of such particular work as the teacher and the school may handle to advantage. Any one of the topics may be omitted without a serious weakening of the work in other topics presented. The object is to provide for schools able to carry it a complete course for the entire year, and for other schools a choice of such a topics as can be taught effectively. The course outlines each of the lessons, enumerating under each topic suggestive supplementary correlation work at advantageous points with the other school subjects.

The course is designed to be a minimum course with such unit arrangement that the minimum may include any one of the topics, or all of the twenty-five topics outlined. The grouping of lessons is arranged so that any number of topic lessons which should be presented in relative order are so arranged. The different groups composed of one or more lessons are then arranged so far as possible for seasonal presentation. The outline gives directions as to the particular units of the work to be presented in the number of lessons indicated in each group.

The following outlines for birds, cattle, corn, farm management, home sanitation, horticulture, potatoes, poultry, soils, and wheat are illustrations selected from the twenty-five topical outlines listed:

Birds—3 lessons
1. Feeding habits
2. Beneficial and harmful birds
3. Protection and extermination

Cattle—5 lessons
1. Beef and dual purpose types: breeds; characteristics
2. Dairy type
3. Feeding and care of cattle
4. Butchering, cutting, and curing
5. Beef as a food: cooking

Corn—42 lessons
1. Examination of an ear of corn (roasting ear stage)
2. Field lesson—counting the stand
3. Class report on field lesson—counting the stand
4. Reports on counting the stand in the home field
5. Desirable characteristics of the corn plant
6. Selecting corn in the field for seed or exhibition

7. Storing seed corn
8. Pupils' reports on home procedure of seed corn handling
9. Field lesson—determining yield according to number of ears
10. Classroom work based on preceding field lesson
11. Field lesson—finding out the best stand of corn
12. Classroom work based on preceding field lesson
13. Corn products
14. Lesson on the parts of the corn kernel
15. Corn history—types, varieties
16. Securing and preparing samples of corn for judging in school
17. Judging corn; use of score card; "Will it yield?"
18. Judging corn; use of score card; "Will it ripen?"
19. Judging corn; use of score card; "Will it grow?"
20. Judging corn; use of score card; "Does it show improvement?"

21–25. Practice in scoring and judging corn

26. Methods of improving corn
27. Crop rotations
28. Place of corn in rotation and why
29. How to make corn germination boxes
30. Testing seed corn
31. Reports on tests at home
32. Study of the young corn plant
33. Requirements of the young plant
34. Grading seed corn
35. Testing the corn planter
36. Purposes of the seed bed
37. Preparation of the seed bed
38. How to plant corn
39. Cultivation of corn
40. Animal pests in the cornfield and their destruction
41. Weeds in the cornfield and their prevention
42. Insect enemies of corn and their treatment

Farm management—6 lessons

1. Choice of crops and animals to be raised
2. Division of farm into field, pasture, meadow, etc.
3. Borrowing and lending implements; trading labor
4. Buying and selling: the home market; mail orders
5. Utilization of by-products and waste materials
6. Rural roads

Home sanitation—6 lessons

1. Disposal of garbage
2. Flies and mosquitoes
3. Drainage
4. Water supply: wells, springs, cisterns
5. Farm buildings: location, convenience, utility, care of
6. Back yard: sanitation of barns, feed lots, and poultry houses

Horticulture—15 lessons

1. Caring for the fruit crop
2. Canning and preserving fruits and vegetables
3. Care of winter vegetables
4. Cooking of vegetables
5. Gathering and storing garden seed
6. The hotbed and the cold frame
7. The tomato
8. The home garden
9. Buying and transplanting young trees and shrubs
10. Pruning
11. Propagation from cuttings
12. Grafting and budding
13. Spraying
14. Beautifying the home grounds
15. Identification of young plants

Potatoes—6 lessons

1–2. Potato judging—study of the tuber
3. Care of crop

4. Selection and preparation of seed; treatment of scab
5. Preparation of seed bed; cultivation; spraying
6. Ways of preparing as food

Poultry—11 lessons
1. Types and breeds of chickens
2. Feeding and care for winter egg laying; poultry pests
3. Egg records; marketing eggs
4. Eggs as food
5. Feeding for market; marketing, dressed and live
6. Getting ready for poultry shows
7. Ducks, geese, and turkeys
8. Preparing poultry as food
9. The poultry house and runs
10. Hatching; care of chicks
11. Storing and preserving eggs

Soils—5 lessons
1. Composition
2. Capillarity of soil and retentivity of moisture
3. Effects of cultivation
4. Manures: barnyard and green manures
5. Rotation of crops; effect on fertility; value of clover and alfalfa

Wheat—4 lessons
1. Study of wheat plant
2. Culture
3. Uses—manufacture of flour
4. Bread-making

COURSES OF HOME WORK FOR SCHOOL CREDIT

Home industrial work and activities outside of school which have educational value contribute strong support to the course of study in agriculture, home economics, and manual training offered in the school.

The course of study in the school can well be supplemented by a "home activities" course. The state of Oregon seems to be leading in the plan of giving proper school credit for meritorious home work. In answer to the query: "How can school credit be given for work done at home?" State Superintendent L. R. Alderman replies:

This may be accomplished by printed slips asking the home to take account of the work that the child does at home under the instruction of the home, and explaining that credit will be given this work on the school record. These slips must be prepared for children according to age so that the child will not be asked to do too much, for it must be clearly recognized that children must have time for real play. "The required tasks must not be too arduous, yet they must be real tasks. They must not be tasks that will put extra work on parents except in the matter of instruction and observation. They may well call for the care of animals, and should include garden work for both boys and girls. Credit in school for home industrial work (with the parents' consent) should count as much as any one study in school."

"To add interest to the work, exhibitions should be given at stated times so that all may learn from each other and the best be the model for all." The school fairs in Yamhill, Polk, Benton, Lane, Wasco, and Crook counties, together with the school and home industrial work done at Eugene, have convinced me most thoroly that these plans are practicable, and that school work and home work, school play and home play, and love for parents and respect for teachers and fellow-pupils can best be fostered by a more complete co-operation between school and home, so that the whole child is taken into account at all times.

A group of Iowa teachers after discussion of the home work and school credit plan included the following as suggestive items for a "course of home work" to supplant the "course of school study," with the recommendation that a time limit be placed on each item and a minimum total credit during the year be allowed, with the provision that where the work is clearly a definite part of any work carried in school, credit be applied in such subject. Many such applications can well be made, such as: credit in physiology, for work in personal and community hygiene; in agriculture, for garden and farm work requiring knowledge of principles and skill in application; in manual training and home economics, for respective tasks well performed, and operations mastered; in language and arithmetic, for "write-ups" and real problems developed and solved; in geography, for local geography work; in civics, for community betterment work; in writing and drawing, for carefully prepared reports and illustrations worked out which relate to home accomplishment or study.

SUGGESTIVE ITEMS FOR COURSE OF HOME WORK TO RECEIVE SCHOOL CREDIT

(Submitted by a group of Iowa teachers)

Repairing buildings and other property
Destroying highway weeds; draining stagnant pools
Bread-baking; personal hygiene; bookkeeping—home accounts
Making rabbit traps, kites, sleds, wagons, etc.
Delivering and buying goods
Going to church, Sunday school, and lectures
Definite garden work; doing chores; hunting eggs
Testing seed corn; setting hen and caring for brood of chickens
Cleaning teeth; taking bath
Sleeping with wide open window, one month; early to bed
Preparing meals; helping old or weak person or younger child
Washing and wiping dishes; preparing school lunch
Testing garden and flower seeds
Raising certain vegetables or crops
Feeding horses, cows, pigs, or chickens
Running harvester, mower, or other machine
Doing ditching or draining work; doing landscape gardening work
Cleaning floors; clearing up yards; mowing lawn, raking yard
Recognizing and knowing trees
Reading certain books or magazines
Collecting and knowing certain insects, leaves, flowers, grasses, weeds
Taking pictures of birds and other things
Canning fruit, baking, cooking, sewing, mending, sweeping, dusting
Chopping wood, carrying water and wood supply
Raking lawn, trimming trees and shrubs
Building sidewalks, bird cages, dog houses
Putting up shelves, making screen doors and windows
Making doll's clothes, and wearing-apparel for people
Growing acre of corn or other crop
Feeding and caring for pigs, colts, calves, or chickens
Picking, sorting, and grading fruit
Boys' and girls' club work; contests
Learning to play musical instruments
Learning to sing certain songs
Making sleds, wheelbarrows, chicken coops, cupboards, gates, boxes, troughs
Gardening—vegetables and flowers
Recognition and knowledge of birds
Mending clothing; mending furniture
Repairing machinery and harness
Picking seed corn before freezing weather

Selecting large hills of good potatoes for seed
Planting shade trees
Reading and reporting topics in farm papers
Making an approximate inventory of the farm or home
Measuring the farm and figuring the acreage in different fields
Keeping account of young stock sold
Planting a certain amount of garden
Growing a patch of seed corn and figuring the amount of profit
Gathering a collection of bugs
Learning to identify a certain number of common weeds
Taking care of a runt pig and telling how it was done
Feeding and describing the feeding of cows
Milking cows; stacking grain; feeding livestock; cement work
Fixing harness; shoe repairing; cow or hog herding
Breaking colts; driving four-horse team; shocking grain
Orcharding; pruning, spraying, grafting
Berry culture or flower culture
Athletics (not necessarily school credit, but athletic credit)
Swimming, rowing, skating, tennis

The following lists were evidently intended to show parallel work for boys and girls:

BOYS		GIRLS	
Care of lawn	10 minutes	Washing dishes	10 minutes
Care of horse	10 minutes	Sweeping and dusting	5 minutes
Care of garden	10 minutes	Preparing meals	15 minutes
Bringing in wood	5 minutes	Mending clothes	10 minutes
Running errands	5 minutes	Running errands	5 minutes

(Submitted by a woman)

School Credit for Girls' Work		School Credit for Boys' Work	
Washing dishes	10 minutes	Cleaning rugs	10 minutes
Making bed	5 minutes	Keeping furnace fire	10 minutes
Sweeping room	10 minutes	Mowing lawn	5 minutes
Preparing meal	15 minutes	Caring for horse	5 minutes
Tending flower garden	5 minutes	Garden work	5 minutes
Current topic reading	5 minutes	Current topic reading	5 minutes
Personal hygiene	10 minutes	Personal hygiene	10 minutes

(Submitted by a woman)

CHILD WORK ON THE FARM OTHER THAN THAT ALREADY MENTIONED

Girl	Boy
Churning	Feeding livestock
Mending clothes	Milking
Taking care of baby	Harnessing horses
Outside reading	Gardening
Church	Church

(Submitted by a man)

The above items are given as they came from teachers, except some duplications which are not included. In many cases, they lack definiteness, and include some work which might be questioned as fitting for school credit, but the ideas represented may easily find expression in definite forms and regulations which can be made to bring most desirable results in home and school co-operative work and association to the advantage of school work and home life. When the child learns that "work is education" and that education is living and working the best way, there will be few dull school days and discontented home days.

Our courses of study should recognize and encourage this kind of education, not only in agriculture, but in every other subject worthy of a place in the school curriculum.

Respectfully submitted,

Committee

E. C. BISHOP, *Chairman*
Schools Section, Extension Department,
Iowa State College, Ames, Iowa

B. M. DAVIS
Professor of Agricultural Education,
Miami University, Oxford, Ohio

C. L. HOWE
Director Agricultural Education,
Department of Public Instruction, Albany, N.Y.

RILEY O. JOHNSON
Department of Biology and Agriculture,
State Normal School, Chico, Cal.

JOSIAH MAIN
Professor of Agriculture,
Western State Normal School, Hays, Kans.

E. E. BALCOMB
Department of Agricultural Education,
State Normal and Industrial College, Greensboro, N.C.

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